Great Winter

A Game Design Document
by
Steam Powered Studios
2.6.3 Approaching a Rune

2.6.4 Picking up a Rune

2.6.5 Placing a Rune in an Altar

2.6.6 Dropping a Rune

2.6.7 Destroying a Rune

2.6.8 Rune Details

2.7 ALTARS

2.7.1 Altar Placement

2.7.2 Neutral Altars

2.7.3 Placing a Rune in an Altar/Claiming an Altar

2.7.4 Altar Energy

2.7.5 Healing Altars

2.7.6 Damaging Altars

2.7.7 Depleting an Altar’s Energy

2.8 PICKUPS

2.8.1 Draught of Life

2.8.2 Steamcharger

2.9 USER INTERFACE

2.9.1 Main Menu

2.9.2 Settings

2.9.3 HUD

2.10 SONIC EXPERIENCE

2.10.1 Music

2.10.2 Sound Effects
Section 1: Introduction, Concept, and Story

1.1 Introduction

In the ancient days of the Northlands, the prophetess foretold our time, when the cold would spread across the worlds and Fenrir would shake his bonds and the first rumblings of the all-consuming battle of Ragnarok would begin. And though much has changed over the long years, the prophesied Great Winter has come at last. In these days the cold seeps into the great halls of men and gods, into the dens of trolls and giants, and into the caves of dwarves, where even their steam-driven wonders cannot keep the chill at bay. It gnaws at the hearts of warriors and minds of the battle-proud, goading them with anticipation of the glories to come, as the first skirmishes of the great battle begin, and immortal blood stains the ice red.

Even now Loki, through trickery and guile, has freed himself and makes his way to the underworld to gather the dead for their assault on Asgard. He has summoned the trolls to his side, their devotion bolstering his diminished strength. However, the ravens of Odin, chief of the Æsir, have whispered the news of Loki’s escape in his ears. While his forces train for Ragnarok, the All-Father has called on the dwarves to join him and slow Loki’s march. Many ages have passed since Loki’s imprisonment, and new weapons and devices wrought by human ingenuity, dwarven skill, and troll cunning have altered the battlefield. However, the ancient magic of the runes still holds sway, as do the great powers of the gods.

1.2 Focus

Great Winter is a multiplayer mod for Unreal Tournament 2004 that focuses on fast-paced, wide-scale conflicts between two teams of players battling for power-up advantages and the defense of their gods.

1.3 Story

"Ragnarok, also called the Doom of the Gods, means the end of the cosmos, the end of all things. It will be preceded by Fimbulwinter, the winter of winters, the Great Winter. Three such winters will follow each other with no summers in between." Those were the words spoken by the seer thousands of years in the past. The words were written and remembered by all the gods, who began to prepare for the end times, the final battle. Odin, leader of the gods, gave the Valkyries the task of collecting those who would die in valorous battle. These warriors would remain in Valhalla until the final days, preparing to fight for Odin and the Æsir. Loki set his daughter, Hel, to gather the remaining dead, to serve as his army. The mischievous god hoped that perhaps he could defeat Odin and survive the end, thus emerging as the most powerful god.

Now, in these days, the cold winter persists and the Earth begins to shake as Fenrir, the mighty wolf destined to defeat Thor, frees himself and Jormungand, the world serpent, rises from the seas to devour all. The armies of the gods begin to marshal; trolls join the newly freed Loki, who begins his march to Helheim to retrieve his army
of dead. Odin, notified of the evil god’s movements by his ravens Huginn and Muninn, has called upon the Dwarves, those most prepared to immediately mobilize into battle. The skillful Dwarves, known for crafting the great artifacts of power used by the gods, have long been at their inventions and science and have advanced the art of war far beyond simple swords and bows. The battlefield has changed to adapt to the new technology, but the ancient magic and runes hold on to their mighty power.

Men, too, have not been idle over the long years. In Midgard, the world as we know it, empires have come and gone, civilizations have risen and crumbled. The last age was perhaps more terrible than the rest, with weapons of steam and steel that took final and terrible form in great bombs that ripped the very moisture from the air, and so wiped the land clean of forests and grassland, leaving nothing but frigid desert. Here, as elsewhere in the nine worlds, the great winter comes.

Loki moves swiftly, hoping to gain the advantage, thus allowing him to march his army of trolls and the dead to the very gates of Asgard. Odin must slow Loki’s march if the Valkyries are to have time to gather the Einherjar and the gods are to prepare for what will be the final battle, the end of their power.
Section 2: Gameplay

2.1 Introduction

*Great Winter* focuses on fast-paced, team-based gameplay. Each session pits two opposing races—the stocky, stalwart dwarves and the gangling, impish trolls—against each other in a constantly shifting battle for domination. To gain final victory, teams must infiltrate their enemy's base and destroy the opposing god. This is no easy task, for while the god cannot leave his chamber, he is a deadly force within it.

To gain the power needed to defeat the enemy god, players must carry runes created by their own god to altars on the battlefield. If a player successfully installs a rune in an altar, his team gains the ability to respawn there if killed. Every player on his team also gains a power-up, such as increased damage, better armor, or enhanced speed. This team power-up is in effect as long as the team controls the altar—and if they aren't careful, that won't be very long. Players may take over an opposing team's altar by attacking it and, after it becomes neutral, placing their own rune. Teams will need to defend their altars to keep their power-ups, which becomes an increasingly difficult task as they gain more altars. Players must balance offense and defense to hold their own territory and press their advantage.

Players must also rely on their teammates if they hope to achieve victory. It takes time to swap an altar's control—few players will be able to achieve it without protection. Also, if a player carrying a rune is killed, the rune drops to the ground. A teammate may recover the rune, but if an enemy touches it, it shatters. Successful teams will send escorts with their rune-carriers to ensure control of the altars.

Players will also find it difficult to face the enemy's god alone. Not only are the gods heavily armored and supported by opposing players, they also have deadly area-of-effect attacks of their own. Teams who choose to rush their opponents' base without any power-ups on their side will have to be very skilled—or very lucky—to survive.

However, if the match proves to be too balanced for either team to gain an advantage, a time limit will ensure the pace of the game never drops. Once the time limit elapses, the gods begin losing health. The more altars a team controls, the slower their god dies. In the end, only one side—Loki or Odin, troll or dwarf—will taste the mead of victory.

2.2 Overview

Like the *Unreal Tournament 2004* Onslaught game type, *Great Winter* is a multiplayer first-person shooter in which players are divided into two teams. Each team begins the game in its own base. Each team has a god, a large-scale AI agent, which is confined to the team's base. The object of the game is to destroy the opposing team's god.
A game ends when one team destroys the other team's god. Unlike Onslaught, there are no additional rounds—the first team to destroy their enemy's god wins the game.

- **Number of Players**: 2 – 32 (6 to 24 recommended)
- **Average Play Time**: 10 to 25 minutes

### 2.2.1 Victory and Loss Conditions

There is only one victory condition:
- A team wins when the opposing team's god is destroyed. Gods are destroyed when their health is fully depleted.

Conversely, there is only one loss condition:
- A team loses if their god is destroyed.

In the rare event that both teams' gods are destroyed at the same time, the game is considered a draw and is replayed.

### 2.2.2 Additional Objectives

To give his team an advantage, a player may pick up a rune at his base and place it in an altar. **Runes** are small pickups automatically spawned at a specific location in each team's base. **Altars** are structures placed on the map before the game begins. If a player carrying a rune steps onto a neutral altar, the rune is installed in the altar after a brief charge-up period. Once installed in an altar, the rune grants a specific power-up to all players on the team. The power-up lasts for as long as the altar is under the team's control. In addition, players may respawn at the altar when killed. Players may also attack altars belonging to their opponents to revert the altar back to neutral control.

Players may attack other players (or more accurately, players' avatars may attack other players' avatars—this is a computer game, after all). If a player's health is fully depleted, the player is destroyed, though he may immediately respawn in his team's base or by an altar his team controls.

### 2.2.3 Time Limit

Teams may achieve the victory condition by attacking the enemy's god until his health is fully depleted and he is destroyed. However, each match also has a **time limit**. The default time limit is 20 minutes, but the server host may specify any time limit between 1 and 999 minutes in the Server Options: Game Rules menu.

If neither team has destroyed the opposing god by the end of the time limit, both gods begin losing health. The amount of health they lose per second depends on the number of altars the team controls:

- **3+ Altars**: 0.2% God's Starting Health/second
- **2 Altars**: 0.3% God's Starting Health/second
- **1 Altar**: 0.6% God's Starting Health/second
- **0 Altars**: 0.7% God's Starting Health/second
2.2.4 Starting a New Game
To begin a new game of Great Winter, one player must select the Host Game option from the Main Menu and select a map from the Map Selection screen (see 2.9 User Interface). Once a player has begun hosting a game, other players may join by selecting the hosting player's server from the Server Browser: LAN or Server Browser: Internet menus. Players are added, are assigned to teams, and join the game as per the standard Unreal Tournament 2004 Onslaught game type with one exception: when the match begins, players hear an announcement based on their team:

**Dwarves:**
(Odin's Voice) "Honor our bargain, and defeat Loki!"

**Trolls:**
(Loki's Voice) "Odin is upon us. Slay him!"

2.2.5 Ending the Game
The game ends when one of the gods is destroyed. All of the players' views switch to the god to see his death animation, and the Score Chart is displayed (see 2.9 User Interface). The players hear an announcement based on which team was victorious:

**Dwarves:**
(Odin's Voice) "The Dwarves drink the mead of victory."

**Trolls:**
(Loki's Voice) "The march of the Trolls cannot be halted!"

When the host player decides to continue, or 1 minute elapses, the next map in the map list is loaded and a new game begins.

2.3 Players
There are two types of characters in Great Winter—players and gods. **Players** are characters controlled by human players. They are divided into two teams—Dwarves and Trolls. Except for their appearances, players on both teams are identical. Players begin the game at pre-defined spawn points located in their bases, near their gods.

2.3.1 Player Teams
Joining teams, changing teams, adding players to teams, and making preferences for teams operates in the same way as in a standard Unreal Tournament 2004 Onslaught match except for the following changes:

- The name of the Blue team is changed to Dwarves.
- The name of the Red team is changed to Trolls.
- Players cannot choose their character models. Instead, character models are assigned to them depending on their team. Players on the Dwarves team are
assigned Dwarf character models, and players on the Trolls team are assigned Troll character models.

- Bots cannot be used or added in a game of *Great Winter*.

**Dwarves**

The folk of the stones, grown from the body of Ymer at the early days of the world, are destined to stay out of the sun's light until it fails at the beginning of Ragnarok. The dwarves are skillful, inventive, greedy, and treacherous. They choose now, bound by their king Dvalin's oath to Odin, to support the Æsir in the last days of the nine worlds.

Dwarves are stocky humanoids, though not as short as some might be led to believe. Most stand around 5 feet tall. As a rule, they are powerfully built. They have ruddy, burned complexions, having spent their lives toiling over forges buried deep within the earth. In those workshops they have smithed wondrous devices, which have grown in power and complexity as the ages passed. In these days dwarven flying ships are not uncommon, and some dwarves have taken to replacing their own limbs with devices of steel.

Players assigned to the Dwarves team use dwarf character models. Otherwise, there is no difference between Dwarf players and Troll players.

![Concept Art (left) and 3D Rendering (right) of Dwarves by Ben Wagley](image)

*Figure 1*

**Trolls**

Cousins of the Jotun, the great giants of destruction, trolls are purveyors of mischief and mayhem. They delight in pranks, though their humor often dives into outright cruelty. They have dispersed from Jotunheim into all corners of the nine worlds, adapting to the changing eras, lurking in hidden places and preying on those unlucky
enough to stumble into their paths. Their alliance with Loki was a natural fit, and when he leads the dead from Niflheim, they hope to escape the battle hidden in the cities of the underworld.

If they stood straight, trolls might reach 11 feet or more, but their hunched, crooked, lanky forms rarely stand taller than 6 feet. Their elongated noses and chins dominate their faces, their distended legs stay bent at the knees, and their stretched arms almost drag the ground. Scavengers and thieves by nature, the trolls use whatever technology they can get their grubby hands on, often ingeniously modifying it to suit their own cruel needs.

Players assigned to the Trolls team use troll character models. Otherwise, there is no difference between Troll players and Dwarf players.

![Concept Art of a Troll by Dane Munkholm](image)

**Figure 2**

2.3.4 Player Camera
There is no modification from the standard *Unreal Tournament 2004* player camera in *Great Winter*.

2.3.5 Player Movement
There is no modification from the standard *Unreal Tournament 2004* player movement in *Great Winter*. This includes the double jump.
2.3.6 Player Attributes

Players spawn with the following attributes: Health, Kills, Score, and Starting Weapons. The armor attribute from *Unreal Tournament 2004* is not used in *Great Winter*.

**Health**
Health operates as the standard *Unreal Tournament 2004* Health attribute.

**Kills**
A player's Kills attribute keeps track of the number of enemy players he has defeated. Players begin the game with 0 Kills. For each enemy a player defeats, he gains +1 Kills.

When a player is killed, a Draught of Life pickup is created. The defeated player's Kills attribute determines the Health bonus the subsequent Draught of Life pickup provides as follows:

<table>
<thead>
<tr>
<th>Kills Range</th>
<th>Health Bonus</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Kills</td>
<td>10 Health</td>
</tr>
<tr>
<td>1 – 5 Kills</td>
<td>25 Health</td>
</tr>
<tr>
<td>6 – 10 Kills</td>
<td>50 Health</td>
</tr>
<tr>
<td>11 – 20 Kills</td>
<td>100 Health</td>
</tr>
<tr>
<td>21+ Kills</td>
<td>200 Health</td>
</tr>
</tbody>
</table>

When a player is defeated, his Kills attribute resets to 0.

Note that the Draught of Life pickup functions much like the Keg o' Health pickup in standard *Unreal Tournament 2004*. The Health bonus the player receives from the pickup is added directly into his Health score. This total may exceed 100 Health, but it cannot be higher than 200 Health.

**Score**
Each player has a Score. Score has no direct impact on gameplay, but is instead used as a record of the player's actions. Players begin the game with their Scores set at 0. Their individual actions impact their Scores as follows:

<table>
<thead>
<tr>
<th>Action</th>
<th>Score Bonus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Killing an Enemy Player:</td>
<td>+1</td>
</tr>
<tr>
<td>Installing a Rune in an Altar:</td>
<td>+6</td>
</tr>
<tr>
<td>Disrupting Enemy Control of an Altar:</td>
<td>+2</td>
</tr>
<tr>
<td>Assisting the Disruption of an Enemy Altar:</td>
<td>+2</td>
</tr>
<tr>
<td>Dealing the Most Damage to a Disrupted Altar:</td>
<td>+4</td>
</tr>
<tr>
<td>Destroying the Enemy God:</td>
<td>+2</td>
</tr>
<tr>
<td>Assisting the Destruction of the Enemy God:</td>
<td>+2</td>
</tr>
<tr>
<td>Dealing the Most Damage to the Enemy God:</td>
<td>+6</td>
</tr>
</tbody>
</table>

These values are cumulative. For example, a player who both destroys and deals the most damage to an enemy god will have 8 points added to his Score. Note, however, that by definition a player cannot receive points for both assisting the destruction of and destroying the same object.
Each player's score is displayed at the end of the game as detailed in 2.9 User Interface.

Starting Weapons

Each player spawns with three weapons: Mjolnir's Echo, Tears of Freya, and Tyr's Cannon. These are the only weapons players can carry; there are no additional weapon pickups in Great Winter. Each weapon begins with the following default ammo amounts:

<table>
<thead>
<tr>
<th>Weapon</th>
<th>Ammo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mjolnir's Echo</td>
<td>100% Charge</td>
</tr>
<tr>
<td>Tears of Freya</td>
<td>30 Bolts</td>
</tr>
<tr>
<td>Tyr's Cannon</td>
<td>50 Charges</td>
</tr>
</tbody>
</table>

2.4 Gods

Gods are AI agents that represent the Norse gods leading the Dwarves and Trolls into battle. Each level has two gods—Odin and Loki—who are placed on the map in the Dwarf and Troll bases, respectively. Except for their appearances, both gods are identical.

Note that the gods do not benefit from team bonuses gained from the Damage, Speed, Armor, or Healing runes. They do, however, benefit from the God's Shield rune.

Odin

The chief of the Æsir, Odin the All-Father gave his own eye for knowledge, hanged himself from the branches of Yggrasil as a sacrifice to himself for wisdom. He knows what horrible fate awaits him in the final battle, and still he leads. This confrontation with his adopted son Loki is not the first, and will not be the last.

In his current form, Odin stands around 25 feet tall. He has weathered the long years well, though deep creases line his face and his beard has turned white. He goes into battle bearing runic armor and carrying the dwarf-forged spear Gungnir.

Odin uses the Odin character model and leads the Dwarves team. Otherwise, there is no difference between Odin and Loki.

Note that Odin is approximately 5 times the height of a standard player.
Loki

Though born a giant, Loki is Odin's adopted son and has used his wit and trickery to be both ally and antagonist of the Æsir. However, Loki's frolics went too far when they claimed the life of Baldr, Odin's beloved son. For his role in the tragedy, Loki was imprisoned and tortured for countless centuries. Now that he has been freed, Loki has a final prank to pull: to lead the dead from the underworld and join the giants in the battle of Ragnarok.

In his current form, Loki stands around 25 feet tall. Wild-eyed and chaotic, Loki bears the scars of the acidic venom that burned him in his captivity and wears a smile that speaks more of madness than mirth.

Loki uses the Loki character model and leads the Troll team. Otherwise, there is no difference between Loki and Odin.

Note that Loki is approximately 5 times the height of a standard player.

2.4.1 Movement

The gods may make all the movements available to a standard Unreal Tournament 2004 player. However, they may not move outside of the room (or designated area) in which they are placed.

2.4.2 Attributes

Gods have the following attributes:
Health

Health represents the amount of damage the god may take before he is destroyed. Once a god loses Health, he cannot recover it; gods cannot pick up Draughts of Life or benefit from the effect of the Healing rune.

Gods begin the game with an amount of health proportional to the number of players on the enemy team, as per the following chart:

<table>
<thead>
<tr>
<th>Enemy Team Size:</th>
<th>God’s Health:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>400</td>
</tr>
<tr>
<td>2</td>
<td>600</td>
</tr>
<tr>
<td>3</td>
<td>700</td>
</tr>
<tr>
<td>4</td>
<td>800</td>
</tr>
<tr>
<td>5</td>
<td>875</td>
</tr>
<tr>
<td>6</td>
<td>1000</td>
</tr>
<tr>
<td>7</td>
<td>1025</td>
</tr>
<tr>
<td>8</td>
<td>1050</td>
</tr>
<tr>
<td>9</td>
<td>1075</td>
</tr>
<tr>
<td>10</td>
<td>1100</td>
</tr>
<tr>
<td>11</td>
<td>1200</td>
</tr>
<tr>
<td>12</td>
<td>1200</td>
</tr>
<tr>
<td>13</td>
<td>1225</td>
</tr>
<tr>
<td>14</td>
<td>1250</td>
</tr>
<tr>
<td>15</td>
<td>1275</td>
</tr>
<tr>
<td>16+</td>
<td>1300</td>
</tr>
</tbody>
</table>

All enemy attacks damage gods for their standard damages, unless the team has placed the God's Shield rune, in which case all damage to the god is reduced by 15%.

If neither team has destroyed the opposing god by the end of the time limit, both gods begin losing health. The amount of health they lose per second depends on the number of altars the team controls:

- **3+ Altars**: 0.3% God’s Starting Health/second
- **2 Altars**: 0.4% God’s Starting Health/second
- **1 Altar**: 0.7% God’s Starting Health/second
- **0 Altars**: 0.8% God’s Starting Health/second

When all of a god’s health has been depleted, the god is destroyed and the game ends.

When a god receives damage, the following message appears to all members of the god’s team:

- **Dwarves**: Odin is under attack!
- **Trolls**: Loki is under attack!
2.4.3 Attacks
Gods do no carry weapons. Instead, they have an innate attack. The appearance of each attack is different:

**Odin:** Odin points his spear at his target. A heartbeat later, there is an explosion of blue energy at the target area.

**Loki:** Loki does a fast spell casting movement with his right hand and points at his target. A heartbeat later, a fireball erupts in the target area.

For gameplay purposes, these attacks are identical.

Gods attack in the following manner:
- The god chooses an enemy player as his target.
- The god points at his target.
- There is a 0.3 second pause.
- There is an explosion at the point the god indicated. All enemy players within the radius of the explosion take damage.
- The god must wait 2 seconds before attacking again.

The gods' attacks have the following stats:

<table>
<thead>
<tr>
<th>Attack Damage:</th>
<th>Very Heavy (150)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of Effect Radius:</td>
<td>Medium (@ 256 Unreal Units)</td>
</tr>
<tr>
<td>Knock back:</td>
<td>Strong</td>
</tr>
<tr>
<td>Range:</td>
<td>Medium (@ 2048 Unreal Units)</td>
</tr>
<tr>
<td>Fire Rate:</td>
<td>Slow (1 shot/2 seconds)</td>
</tr>
<tr>
<td>Player Death Message: (appears when a player is killed by this attack)</td>
<td><strong>Loki:</strong> [Killed Player] fell to Loki's magic. <strong>Odin:</strong> [Killed Player] crumbled beneath Odin' might.</td>
</tr>
</tbody>
</table>

This attack’s area of effect damage behaves as the standard area of effect damage type in *Unreal Tournament 2004*, so that players at the center of the attack take full damage, while players further away take damage proportional to their proximity to the center.

2.4.4 Behavior
Gods stand in their placed positions until they detect an enemy player. The gods may see or hear any enemy player within their attack range (@ 2048 Unreal Units). Upon detecting an enemy player, the god will immediately attack and continue attacking until the enemy player has been destroyed. When presented with multiple enemies, the god will give priority to the enemy that has dealt him the most damage.

The god may also move and attempt to dodge enemy attacks. However, the god may not move outside of the room (or other designated area) in which he is placed.
2.5 Weapons

Players use weapons to deal damage to their enemies. In *Great Winter*, the player always carries three weapons: Mjolnir's Echo, Tears of Freya, and Tyr's Cannon. There are no additional weapons to pick up. As with standard *Unreal Tournament 2004* weapons, all weapons in *Great Winter* have primary and secondary fire modes. When the player presses the Primary Fire button, the weapon fires in primary fire mode. When the player presses the Alternate Fire button, the weapon fires in secondary fire mode.

2.5.1 Changing Weapons

Players always carry all three of the available weapons. However, a player may only have one weapon selected and ready fire at a time, as in *Unreal Tournament 2004*. The player may use the standard *Unreal Tournament 2004* weapon selection methods to select weapons. Weapon slots are assigned as follows:

<table>
<thead>
<tr>
<th>Slot 1:</th>
<th>Mjolnir's Echo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slot 2:</td>
<td>Tears of Freya</td>
</tr>
<tr>
<td>Slot 3:</td>
<td>Tyr's Cannon</td>
</tr>
</tbody>
</table>

Players spawn with Mjolnir's Echo selected.

2.5.2 Ammunition

All weapons use ammunition, which is depleted with each attack as per the weapon's description. When all of a weapon's ammunition has been depleted, the weapon may not be used to attack until the player picks up more ammunition at a Steamcharger. The exception is Mjolnir's Echo, which regenerates its own ammunition.

2.5.3 Mjolnir's Echo

In the ancient days, after being petrified by Odin's son Thor, the dwarf Alviss was revived by Loki. Seeking revenge on Thor, Alviss forged 100 copies of Thor's great hammer Mjolnir, though he diminished their strength so they could be carried without the aid of Thor's belt or gloves. He distributed these hammers, 'Mjolnir's Echoes', to the enemies of the Æsir. Not to be bested by this feat of smithing, the dwarf king Dvalin forged his own 100 Mjolnir's Echoes and gave them to the other dwarves.

Though they lack the striking power of Thor's mighty hammer, Mjolnir's Echoes share the original's command over lightning. The primary fire of Mjolnir's Echo shoots a dancing arc of electricity ahead of the player that damages any enemy it touches. This attack can also replenish the energy of a friendly altar or deplete the power of an enemy altar. For a secondary attack, Mjolnir's Echo summons a lightning bolt that strikes the wielder. Though it does no harm to the player holding the hammer, all enemies standing nearby take heavy damage. This combination of firing modes makes the hammer an excellent weapon for medium to close-range combat.

Mjolnir's Echo is a one-handed weapon, carried in the player's right hand.
Weapon Slot
Mjolnir's Echo occupies Slot 1.

Ammunition
Mjolnir's Echo is a semi-magical weapon which does not use normal ammunition. Instead, it drains a battery which is continually recharged. The battery holds a maximum of 100 units of ammunition. The ammo recharges at a rate of 20 units per second. While the player is firing Mjolnir's Echo, its ammunition does not recharge.

When the player spawns, Mjolnir's Echo is fully charged.

Primary Fire
In primary fire mode, the player holds up Mjolnir's Echo and tilts it forward. A continuous stream of lighting fires out of the hammer as long as the player continues to hold down the button, or until the weapon's ammunition is depleted.

The primary fire mode on Mjolnir's Echo has the following attributes:

<table>
<thead>
<tr>
<th>Attack Damage:</th>
<th>Medium (9 damage per 0.12 seconds, as <em>Unreal Tournament</em> 2004's link gun alternate fire)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knock back:</td>
<td>Slight</td>
</tr>
<tr>
<td>Range:</td>
<td>Medium (@ 2048 Unreal Units)</td>
</tr>
<tr>
<td>Fire Rate:</td>
<td>Continuous</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Accuracy:</td>
<td>High</td>
</tr>
<tr>
<td>Ammo Consumed:</td>
<td>20 per second</td>
</tr>
<tr>
<td>Player Death Message:</td>
<td>[Player Name] fell to [Attacking Player]'s mighty hammer.</td>
</tr>
</tbody>
</table>

**Fire Rate:**

The primary fire on Mjolnir's Echo can deplete the energy of—ie, damage—enemy altars. It is the only attack that can do this. The damage is equal to the weapon's normal damage.

The primary fire on Mjolnir's Echo can also replenish the energy of—ie, heal—friendly altars. It is the only attack that can do this. The rate of healing is equal to the weapon's normal rate of damage. While healing an altar, the lightning fired by Mjolnir's Echo assumes the hue of the lightning in the altar.

**Secondary Fire**

For its secondary fire, the player holds Mjolnir's Echo overhead. A lighting bolt strikes the player, and the shock radiates out from his character model. The player takes no damage, but all enemies within the attack’s radius take damage as indicated below:

<table>
<thead>
<tr>
<th>Attack Damage:</th>
<th>Very Heavy (150)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area of Effect Radius:</td>
<td>Small (@ 128 Unreal Units)</td>
</tr>
<tr>
<td>Knock back:</td>
<td>Medium</td>
</tr>
<tr>
<td>Range:</td>
<td>0</td>
</tr>
<tr>
<td>Fire Rate:</td>
<td>Slow (1 shot/1.3 seconds)</td>
</tr>
<tr>
<td>Ammo Consumed:</td>
<td>50</td>
</tr>
<tr>
<td>Player Death Message:</td>
<td>[Killed Player] was struck by [Attacking Player]'s lightning.</td>
</tr>
</tbody>
</table>

This attack's area of effect damage behaves as the standard area of effect damage type in *Unreal Tournament 2004*, so that players at the center of the attack take full damage, while players further away from the center take damage proportional to their proximity to the center.

**2.5.4 Tears of Freya**

The crimson tears the goddess Freya cried in her husband Odr's absence were stolen by her handmaiden, who then sold them to the Jotun. The giants discovered that the tears were harder than the strongest steel, and used them for crossbow bolts. They forced the dwarf Alfrik to create a crossbow powerful enough to fire the tears of the goddess, but Alfrik tricked the giants and kept a number of the bows and bolts for himself. These he gave to the other dwarves, just as the Jotun gave theirs to their allies.

The mechanical clip-fed crossbows known as Tears of Freya are highly accurate and pack a powerful punch. In their primary fire mode, they sacrifice reload rate for range and accuracy, making them ideal sniping weapons. Secondary fire launches a
A bolt bundled with an explosive. Though the extra weight reduces the range and speed of the bolt, it greatly increases the damage.

Tears of Freya is a two-handed weapon.

**Weapon Slot**

Tears of Freya occupies Slot 2.

**Ammunition**

Tears of Freya uses crossbow bolts for ammunition. The maximum ammunition is 30 bolts. The player spawns with 30 bolts. The player may only regain crossbow bolts by stepping into a Steamcharger.

**Primary Fire**

In primary fire mode, Tears of Freya fires a single red-tipped crossbow bolt. The primary fire mode on Tears of Freya has the following attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attack Damage:</td>
<td>Moderate (50)</td>
</tr>
<tr>
<td>Knock back:</td>
<td>Moderate</td>
</tr>
<tr>
<td>Range:</td>
<td>Long (@ 8192 Unreal Units)</td>
</tr>
<tr>
<td>Fire Rate:</td>
<td>Moderate (1 shot/.6 seconds)</td>
</tr>
<tr>
<td>Projectile Speed:</td>
<td>Very Fast</td>
</tr>
<tr>
<td>Ammo Consumed:</td>
<td>1 bolt</td>
</tr>
<tr>
<td>Player Death Message:</td>
<td>[Attacking Player] put a bolt through [Killed Player]'s heart.</td>
</tr>
</tbody>
</table>

*Concept Art of Tears of Freya by Ben Wagley*

*Figure 5*
If a player is hit in the head by the primary fire of Tears of Freya, he takes double damage from the attack, as with the Sniper Rifle's headshot feature in *Unreal Tournament 2004*.

**Secondary Fire**

In secondary fire mode, Tears of Freya fires a crossbow bolt with a stick of dynamite tied to it. The secondary fire mode on Tears of Freya has the following attributes:

<table>
<thead>
<tr>
<th>attribute</th>
<th>value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attack Damage:</td>
<td>High (90)</td>
</tr>
<tr>
<td>Knock back:</td>
<td>Moderate</td>
</tr>
<tr>
<td>Range:</td>
<td>Medium (@ 4096 Unreal Units)</td>
</tr>
<tr>
<td>Fire Rate:</td>
<td>Slow (1 shot/.8 seconds)</td>
</tr>
<tr>
<td>Projectile Speed:</td>
<td>Moderate</td>
</tr>
<tr>
<td>Ammo Consumed:</td>
<td>2 bolts</td>
</tr>
<tr>
<td>Player Death Message:</td>
<td>[Killed Player] was scattered by [Attacking Player]'s exploding bolt.</td>
</tr>
<tr>
<td>(appears when a player is killed by this weapon)</td>
<td></td>
</tr>
<tr>
<td>Player Suicide Message:</td>
<td>[Killed Player] should stop playing with his crossbow.</td>
</tr>
<tr>
<td>(appears when a player kills himself with this weapon)</td>
<td></td>
</tr>
</tbody>
</table>

The secondary fire of Tears of Freya deals splash damage to all players near its point of impact, as with the Rocket Launcher in *Unreal Tournament 2004*.

If the crossbow bolt reaches the end of its range without hitting anything, it explodes.

### 2.5.5 Tyr's Cannon

Mortal men devised this steam-powered cannon and employed it with such utility and effectiveness on their battlefields that the gods and giants began fashioning their own copies. Tyr, god of war, was the first to bring the weapon to the attention of the Æsir, so it is now known among the gods as Tyr's Cannon (somewhat jokingly, since one-handed Tyr finds his own massive copy of the cannon difficult to wield).

Tyr's Cannon appears to be a massive steam-powered blunderbuss. In its primary fire mode, it projects a cone of super-heated steam over short range, searing any enemies caught inside. Its secondary fire launches a small grenade using the steam pressure of the cannon. The longer the player holds down the trigger, the more the pressure builds and the further the grenade goes.

Tyr's Cannon is a two-handed weapon.
Weapon Slot
Tyr's Cannon occupies Slot 3.

Ammunition
Tyr's Cannon uses steam charges for ammunition. The maximum ammunition is 50 charges. The player spawns with 50 charges. The player may only regain steam charges by stepping into a Steamcharger.

Primary Fire
In primary fire mode, Tyr's Cannon fires cone after cone of superheated steam in a near-continuous stream. The effect is similar to a flamethrower. The primary fire mode on Tyr's Cannon has the following attributes:

<table>
<thead>
<tr>
<th>Damage per Projectile:</th>
<th>Light (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projectiles per Shot:</td>
<td>8</td>
</tr>
<tr>
<td>Knock back:</td>
<td>None</td>
</tr>
<tr>
<td>Range:</td>
<td>Short (@ 512 Unreal Units)</td>
</tr>
<tr>
<td>Fire Rate:</td>
<td>Very Fast (1 shot/.2 seconds)</td>
</tr>
<tr>
<td>Projectile Spread:</td>
<td>Wide</td>
</tr>
<tr>
<td>Projectile Speed:</td>
<td>Fast</td>
</tr>
<tr>
<td>Ammo Consumed:</td>
<td>1 Charge</td>
</tr>
</tbody>
</table>

(appears when a player is killed by this weapon)
Secondary Fire
In secondary fire mode, Tyr's Cannon fires a small fragmentation grenade. The player holds down the secondary fire button to charge this attack, then releases the button to fire the projectile. The longer the player holds down the button, the further the grenade travels, as with Unreal Tournament 2004's Assault Rifle. The grenade does no damage in itself, but instead fires a number of projectiles in multiple directions (similar to Unreal Tournament 2004's Flak Cannon secondary fire).

The grenade has the following attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range</td>
<td>Medium (@ 4096 Unreal Units)</td>
</tr>
<tr>
<td>Fire Rate</td>
<td>Slow (1 shot/.8 seconds)</td>
</tr>
<tr>
<td>Projectile Speed</td>
<td>Moderate</td>
</tr>
<tr>
<td>Ammo Consumed</td>
<td>5 charges</td>
</tr>
</tbody>
</table>

The projectiles have the following attributes:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damage per Projectile</td>
<td>Small (10)</td>
</tr>
<tr>
<td>Projectiles per Shot</td>
<td>10</td>
</tr>
<tr>
<td>Knock back</td>
<td>Slight</td>
</tr>
<tr>
<td>Range</td>
<td>Short (@ 256 Unreal Units)</td>
</tr>
<tr>
<td>Projectile Spread</td>
<td>360 degrees</td>
</tr>
<tr>
<td>Projectile Speed</td>
<td>High</td>
</tr>
<tr>
<td>Player Death Message (appears when a player is killed by this weapon)</td>
<td>[Attacking Player] sacrificed [Killed Player] to his grenade.</td>
</tr>
<tr>
<td>Player Suicide Message (appears when a player kills himself with this weapon)</td>
<td>[Killed Player] jumped on his own grenade.</td>
</tr>
</tbody>
</table>

These projectiles also bounce, as per Unreal Tournament 2004's Flak Cannon.

2.6 Runes
Devised by Dvalin, and learned by Odin as he hung on the world-tree, runes are a source of magic. In Great Winter they appear as stones inscribed with a glowing script, and they are the teams' only way of gaining the power-ups granted by the altars.

2.6.1 Rune Types
There are five runes in Great Winter: Damage, Speed, Armor, Healing, and God Shield. See each rune's entry for more information on its appearance and effects.
2.6.2 Rune Placement
Runes are placed at specific points within each team's base. Each team is given one of each kind of rune. The runes placed in a team's base belong to that team.

2.6.3 Approaching a Rune
When a friendly player steps close to a rune, a message appears detailing the rune's powers:

<table>
<thead>
<tr>
<th>Rune</th>
<th>Message:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damage</td>
<td>&quot;The Damage Rune increases the team's weapon damage.&quot;</td>
</tr>
<tr>
<td>Speed</td>
<td>&quot;The Speed Rune increases the team's movement speed.&quot;</td>
</tr>
<tr>
<td>Armor</td>
<td>&quot;The Armor Rune reduces the damage the team takes.&quot;</td>
</tr>
<tr>
<td>Healing</td>
<td>&quot;The Healing Rune slowly heals every member of the team.&quot;</td>
</tr>
<tr>
<td>God Shield</td>
<td>&quot;The God Shield Rune reduces the damage the team's god takes.&quot;</td>
</tr>
</tbody>
</table>

2.6.4 Picking up a Rune
A friendly player may simply touch a rune to pick it up. When a player picks up a rune, the following occurs:

- His character automatically sends the following Player Speech message to his teammates: "I am the rune bearer."
- The following message appears to the player who picked up the rune: "Place your rune in an empty altar to receive its power." This message appears to the player once every thirty seconds.
- All of the team's other runes are locked and cannot be picked up. The aura around locked runes darkens to indicate that they cannot be picked up by other players.
- A glowing effect appears on the player carrying the rune. This effect as long as he is the rune bearer.

Once a player has picked up a rune, no other player on his team may do the same until the rune he carries is placed in an altar or destroyed. However, the rune bearer may pick up another rune. If he does so, the rune he carries is destroyed and replaced by the rune he picks up. Destroyed runes instantly respawn in their original location.

A player may only pick up runes that belong to his team.

2.6.5 Placing a Rune in an Altar
If a rune bearer steps onto a neutral altar, the following occurs:

- The player is no longer the rune bearer.
- The team's remaining runes are unlocked and may be picked up by any friendly player.
- The altar begins to gain energy, as detailed in 2.7 Altars.
• A column of lightning continually strikes the altar. The hue of the lightning depends on the team that has claimed the altar—blue for Dwarves, red for Trolls.
• The rune placed in the altar appears in the center of the altar, floating and slowly spinning.
• The altar may now be attacked by the opposing team, as detailed in 2.7 Altars.
• The altar may now be healed by friendly players, as detailed in 2.7 Altars.
• The following message is displayed to all players: "The [Dwarves/Trolls] have claimed an Altar."

2.6.6 Dropping a Rune
If a rune bearer is killed, the following occurs:

• The rune being carried appears where the rune bearer died. If this location is higher than ground level, the rune drops to the ground.
• The following message is displayed to all players: "The [Dwarves/Trolls] dropped a rune. Claim it!"
• If a friendly player touches the rune, he picks it up (as in 2.6.4 Picking Up a Rune).
• If an enemy player touches the rune, it is destroyed (as in 2.6.7 Destroying a Rune). Note that all other friendly runes remain locked while a dropped rune is on the ground.
• If a dropped rune is not picked up or destroyed in 30 seconds, it is automatically destroyed.

2.6.7 Destroying a Rune
Runes are destroyed in three situations:

• When an enemy player touches a dropped rune.
• When a player depletes an enemy altar (see 2.7 Altars).
• When a dropped rune remains on the ground for 30 seconds.

When a rune is destroyed, the following message is displayed to all players: "A [Dwarven/Troll] rune has been destroyed."

Destroyed runes instantly respawn in their original location.

2.6.8 Rune Details
There are five runes in Great Winter:

Damage
The Damage rune is represented by the Old Futhark rune HAGALAZ, written in glowing purple. While placed in an altar, it increases the damage of all the friendly team's attacks by 0.25.

While this power-up is in effect, all of the team members' weapons glow with a faint purple aura.
**Speed**
The Speed rune is represented by the Old Futhark rune RAIDHO, written in glowing green. While placed in an altar, it increases the movement speed of all friendly players by 0.4.

While this power-up is in effect, all team members leave faint green tracers as they move.

**Armor**
The Armor rune is represented by the Old Futhark rune ALGIZ, written in glowing yellow. While placed in an altar, it decreases the damage taken by all team members by 0.25.

While this power-up is in effect, all team members faintly glow yellow when hit by weapons.

**Healing**
The Healing rune is represented by the Old Futhark rune URUZ, written in glowing red. While placed in an altar, all team members recover 2 Health every second until they reach a maximum of 100 Health.

While this power-up is in effect, all team members have a faint red aura.

**God Shield**
The God Shield rune is represented by the Old Futhark rune GYFU, written in glowing blue. While placed in an altar, it decreases the damage taken by the team’s god by 0.15.

While this power-up is in effect, the team's god has a faint blue aura.

*Concept Art of Hagalaz, Raidho, Algiz, Uruz, and Gyfu, respectively, by Ryan Hanscom Figure 7*
2.7 Altars

These large standing stones are covered in runic inscriptions, their power enhanced by steamtech devices. They hold ancient magic and modern energy, awaiting any with the power to bind them. A player carrying a rune need only step onto an altar to begin tuning it to his team’s control. The process of tuning takes a few seconds, but players may help it along by using the primary fire mode of Mjolnir’s Echo. The hammer’s primary fire is also the only way to break an opposing team’s control of an altar; once the player has dealt enough damage with Mjolnir’s Echo, the altar will revert back to its neutral state, ready for a new rune.

2.7.1 Altar Placement

Altars are placed on the map by designers. Each map should contain at least three altars.

At the beginning of the game, all altars are neutral.

Altars should have spawn points associated with them. These spawn points should be placed near, but not directly on, the altar.

2.7.2 Neutral Altars

Neutral altars are altars that have not been claimed by either team. At the beginning of the game, all altars are neutral.
If a player depletes the energy of an enemy altar, it becomes neutral.

### 2.7.3 Placing a Rune in an Altar/Claiming an Altar

When a player carrying a rune steps on a neutral altar, the following occurs:

- The player is no longer the rune bearer.
- The team’s remaining runes are unlocked and may be picked up by any friendly player.
- The altar begins to gain energy (see 2.7.4 Altar Energy).
- A column of lightning continually strikes the altar. The hue of the lightning depends on the team that has claimed the altar—blue for Dwarves, red for Trolls.
- The rune placed in the altar appears in the center of the altar, floating and slowly spinning.
- The altar may now be attacked by the opposing team (see 2.7.6 Attacking Altars).
- The altar may now be healed by friendly players (see 2.7.5 Healing Altars).
- The following message is displayed to all players: "The [Dwarves/Trolls] have claimed an Altar."

### 2.7.4 Altar Energy

Energy can be thought of as an altar's Health. However, altars are not destroyed when their energy is depleted—instead, they become neutral. Only altars claimed by teams have energy.

At the beginning of the game, all altars are neutral and have 0 energy. When a player carrying a rune steps on an altar, the altar begins to gain energy. Every second, the altar gains 16 energy. When the altar reaches 500 energy (its maximum), the following occurs:

- The team that claimed the altar gains the effect of the rune that was placed there.
- The team that claimed the altar may now respawn at the altar's spawn points. As in the Unreal Tournament 2004 Onslaught game type, players choose new spawn locations on the main level map (see 2.9 User Interface for more details).

These effects last until the altar's energy is depleted by enemy attacks.

### 2.7.5 Healing Altars

Players may use the primary fire of Mjolnir's Echo to increase the energy—ie, heal—friendly altars. To do this, players simply shoot the altar with the primary fire of Mjolnir's Echo. While healing an altar, the lightning fired by Mjolnir's Echo assumes the hue of the lightning in the altar.

The rate of healing is equal to the weapon's normal rate of damage (9 energy per 1.2 seconds). When the altar reaches 500 energy, it is fully charged and cannot be healed further.

Altars may be healed during their initial energy build-up, speeding up the process.
The primary fire on Mjolnir's Echo is the only attack that can heal an altar.

2.7.6 Damaging Altars

The primary fire on Mjolnir's Echo can deplete the energy of—ie, damage—enemy altars. To do this, players simply shoot the altar with the primary fire of Mjolnir's Echo.

The damage is equal to the weapon's normal damage.

When an altar takes damage, the following message is displayed to all players: "A [Dwarven/Troll] altar is under attack!"

The primary fire on Mjolnir's Echo is the only attack that can damage an altar. If a player hits an altar with another weapon, he hears an audio cue and the following message is displayed: "Use Mjolnir's Echo (Weapon 1) to destroy enemy altars."

Players may not respawn at spawn points associated with an altar while the altar is under attack.

2.7.7 Depleting an Altar's Energy

When an altar's energy has been completely depleted, the following occurs:

- The altar returns to its neutral state.
- The rune placed in the altar is destroyed. Destroyed runes instantly respawn in their original location.
- The team that claimed the altar loses the power-up granted by the rune.
- The team that claimed the altar can no longer respawn there.
- The column of lightning over the altar disappears.

2.8 Pickups

Pickups may be used to recover the player's Health and weapon ammunition. The two pickups in Great Winter are the Draught of Life and the Steamcharger.

2.8.1 Draught of Life

In this battle, the warriors are protected by the magic of their god and never truly fall until their god is dispelled. Instead, each 'death' is followed by a rebirth beside the god or by one of the team's altars. However, the warriors leave something behind when they fall. A little of their essence spills into the world and hangs there for a few moments before being washed away by the tide of time.

This bit of essence is called the Draught of Life. If an enemy warrior claims it, it restores a little of that warrior's health. However, the Draught of Life only appears for a few seconds after a player is defeated, so it must be picked up quickly to gain the health bonus.
Draughts of Life appear as short columns of swirling ethereal energy—red for killed Dwarves, blue for killed Trolls.

**Draught of Life Placement**

When a player dies, a Draught of Life appears at the point where he died. If this location is higher than ground level, the rune drops to the ground.

**Picking Up a Draught of Life**

A player may simply touch a Draught of Life to pick it up.

Only Troll players may pick up Draughts of Life left by killed Dwarves, and only Dwarf players may pick up Draughts of Life left by killed Trolls.

When a player picks up a Draught of Life, he recovers an amount of Health. Like the Keg o’ Health pickup in standard *Unreal Tournament 2004*, the Draught of Life may heal a player more than his standard 100 Health maximum. However, a player may never have more than 200 Health.

A Draught of Life’s Health bonus depends on the Kills attribute of the player who died to create it, as per the following chart:

<table>
<thead>
<tr>
<th>Kills</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>1 – 5</td>
<td>25</td>
</tr>
<tr>
<td>6 – 10</td>
<td>50</td>
</tr>
<tr>
<td>11 – 20</td>
<td>100</td>
</tr>
<tr>
<td>21+</td>
<td>200</td>
</tr>
</tbody>
</table>

When a player picks up a Draught of Life, the following message is displayed: "You gained a Draught of Life + [amount of Health bonus]."

**Draught of Life Duration**

If a Draught of Life is not picked up within 10 seconds of its creation, it disappears.

**2.8.2 Steamcharger**

Deployed by scouts in advance of invading armies, these mechanical reload stations provide ammunition and steam pressure for modern weaponry. They are highly efficient and typically restock a soldier’s ammo supplies in a matter of seconds.
Steamcharger Placement
Steamchargers are placed on the map by designers before the game begins.

Steamchargers never disappear, and may be used by players of both teams any number of times.

Picking up Ammunition
When a player steps into the center of a Steamcharger, his Tears of Freya and Tyr’s Cannon ammunition is completely refilled.

2.9 User Interface

The User Interface is what conveys Great Winter to its players. It is an altered Unreal Tournament 2004 interface in appearance, but all of the functionality remains the same.

2.9.1 Main Menu

A player begins a game in Great Winter by first double clicking the Great Winter icon on their desktop. The main menu then loads and appears on the player’s monitor. It has all of the same options as the standard Unreal Tournament 2004 main menu.
except for the Single Player option. The Main Menu has a decorative background graphic of Odin and Loki, the two gods in Great Winter.

Join Game, Host Game, Instant Action, Community, and Exit UT2004 all work the same way as they do in regular Unreal Tournament 2004. Though, all these screens do have different background graphics and themes. The futuristically styled menu boxes have been replaced with medieval parchment and the laser-lit backgrounds have been replaced by pictures of icy mountain peaks and fjords. The last change to note is that the text for the last menu option “Exit UT2004” has been replaced with “Exit Great Winter”.

2.9.2 Settings
For the most part, the Settings are unchanged, but there are a few minor differences. The most noticeable change is the medieval parchment replacing the futuristically styled boxes, just like the rest of the overhauled user interface. Another change is found in the Player tab. In regular Unreal Tournament 2004 a player may choose their Preferred Team to be Red, Blue, or None. Now the choices are Dwarves, Trolls, and None.

Another Settings difference can be found under the Weapons tab. The weapon list has been updated with the three new weapons added by Great Winter: Mjolnir’s Echo, Tears of Freya, and Tyr’s Cannon.

2.9.3 HUD
The Heads-up Display (HUD) in Great Winter displays much of the same information as the standard Unreal Tournament 2004 HUD. Like the Onslaught HUD, it shows a mini-map of the objectives, and it has a health display for each team’s god (much like Onslaught displays the health for each team’s Power Core). These HUD items are found in the same place Onslaught’s HUD keeps them so that Unreal Tournament 2004 players find it easy to adjust. The time remaining in the match is found in the top left corner, as in standard Unreal Tournament 2004.

The bottom of the screen is also similar to what players find in Unreal Tournament 2004. It displays the player’s health and armor on the left side, but the displays are graphical, rather than numerical. Next to that are the weapons. They are displayed in the same manner as Unreal Tournament 2004 weapons, but with more fitting graphics for a steamtech Norse feel. Because Great Winter has only three weapons, there is room for the runes to be displayed next to them where more weapons are usually displayed in Unreal Tournament 2004. If a rune is being carried by a player, it will appear larger on the HUD for his team so that they all know a rune is in play. If a rune has been placed at an altar, it will appear much brighter than usual so that the team knows they are receiving the benefits of that rune. The ammunition display is also found in a familiar place for veteran players, though the graphic for that has also been altered to fit the theme in Great Winter.

As in Onslaught, a player may bring up a map by pressing ‘M’ on his keyboard. Bringing up the map will allow the player to choose a spawn location if he is standing on an altar his team controls or in his base. He will be able to spawn or teleport to any altar which his team controls. He may also choose to spawn at his base.
Players may also check all the screens that may normally be checked in *Unreal Tournament 2004*. By pressing the 'F1' key, they can check their score, the scores of their teammates, and the scores of the opposing side. This also displays automatically once a game has been won or lost. The graphics of this screen have been adjusted to fit with the rest of the *Great Winter* HUD.

![Concept Art of the HUD by Ryan Hanscom and Dane Munkholm](image)

*Figure 10*

### 2.10 Sonic Experience

*Unreal Tournament 2004* isn’t the same without its music and sound effects. *Great Winter* takes advantage of these features, but adjusts them to make the Norse atmosphere of the mod come alive to a player’s ears.

#### 2.10.1 Music

The standard *Unreal Tournament 2004* music has been replaced by classical music pieces written by Mozart, Beethoven, and Bach among others. It gives the *Great Winter* mod a much more appropriate feel because the musical era coincides more with the gameplay era. One of the pieces will certainly be Wagner’s "Ride of the Valkyries". This piece fits perfectly in *Great Winter* because Valkyries come from Norse mythology, just like this mod.
2.10.2 Sound Effects

New sound effects have been added for all three new weapons. Each weapon has a uniquely appropriate firing sound, and the projectiles have the same for their impacting and flight sounds. The rest of the sound effects are *Unreal Tournament 2004* defaults, but replaced with voices of Loki, Odin, Trolls, and Dwarves. The announcements are made by Loki for Troll players and by Odin for Dwarf players. Loki and Odin both have booming, commanding voices, but Loki’s voice has a bit of an evil sound to it (he holds long on his letter’s like a hissing snake). The different taunts and gestures have been replaced. Dwarves speak all the phrases with a Scottish accent while the Trolls say things in a hissy, snakelike way. New phrases have been added as well (see 2.2 Overview).