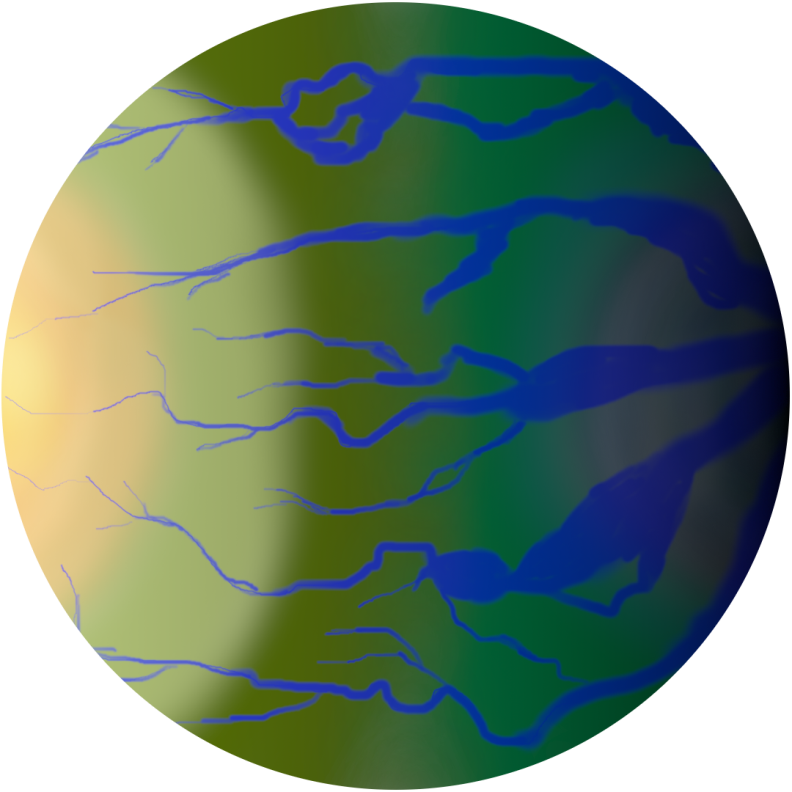
**St Lawrence College Presents**

**Night and Day**

Heroes bound to a world apart

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**Game Design Document**

By

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Meet Shaileshkumar  
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Jordan Tuck

Game 103: Introduction to Gaming  
Victor Tilley

**2. Game Overview** (Meet Shaileshkumar)

**2.1. Game Concept:**

There is a God with the evil brother which name Dante, and he has own huge kingdom which is well developed and powerful. Once he realizes to share his resources, knowledge and power to the king of small kingdom which are living under his hand. Then, he shared all the resources to the kingdom, but the twist is, his brother took over his knowledge, power and kingdom while he is not aware. And then his brother killed him and started ruling over small kingdoms and tortured them to get back all the magical resources given by the king. With the help of his dark powered army to achieve victory over the other kingdoms, he started torturing the kings and tried to evade them to get their kingdom and the magical resources back. But the kings used their power and abilities to defend him. Though they upgraded their army to defend him, made a new structure of the kingdom, found new resources as well. Moreover, heplanned and upgraded their own ability and made friendship with the other kingdoms to terminate the evil brother. Sometimes they need to defeat the other kingdoms to get a new resource from them. And with the help of other kingdoms and their resources he gather all the magical resources together and take full control on its power and defeat evil god by using them.in this war against evil god, many times he get rise and many times fall but once he master the god power he will get victory.

**2.2. Genre:**

This game category is MMO (Mass Multiplayer Online) and RPG (Role play Game), The player feel itself in the game character by playing role of character as well as in the game many players play game on same time.

**2.3. Target Audience:**

This game is the combination of ancient war and sci-fiction and mass multiplayer online game, in this game player must survive, collect new resources, expand the kingdom and find new strategies for win the game. Due to this feature, ability and concept which attract the audience and enhance their passion about game. Game have its own criteria which make it different from the other.

**2.4. Game Flow Summary:**

In a starting of the game players waiting for division of kingdom and after that they got one special character which help them while playing a game by guiding and suggest them in the deferent level of the game then player has to play game as like player is king of own kingdom and expand, defend and defeat the other player as well as games main opponent, then the player got victory, so in the game player pass through deferent levels and use a deferent variety of UI.

**2.5. Look and Feel:**

The basic look of the game is like open world which prefer a look like ancient Vikings and player also looks like ancient king. In the game structure, building and all other stuffs looks like past time village and kingdom. So, the game visual style is like time of Vikings and kings. Moreover, during game play, player feels the role of the game character. Therefore, player get interested to play more & more.

**3. Game play and mechanics** (Matthew Shea)

**3.1. Game play**

**3.1.1.**   
 The progression will be for the player to level up and unlock new abilities and work towards gaining control for their side.

**3.1.2.** Missions will be in the following structures and take place mostly away form the main fighting:

- Fetch quest to find objects in the world

- kill quests to clear out enemies in each area

- collection quests where the player will have to collect an item for enemies and bring them back

- crafting quest where the player will need to craft an item for the NPC

- knowledge quests where the player will preform a series of task for their class to unlock even more powerful skills.

- settlement setup where players will work together to build a settlement and defend or attack the opposing settlements.

**3.1.4.** Players must fight for control over the middle area.

**3.2. Mechanics**

**3.2.1.**  The physics will be realistic as objects will move when you push them and will fall with gravity when they should.

**3.2.2.**  The movement will be standard walking and for using stamina the player will be allowed to run

**3.2.3.**  Objects will be moved by the player picking them up if they have enough strength (example every level of strength would be equal to 15 lb) or if they use magic and have a high enough power level to lift the object (Example level 1 cant lift 50 lb bag but level 3 can)

**3.2.4.**  Switches and buttons will be used to interact with larger objects in the game world that the player shouldn’t normally be able to interact with like a gate. These will also be used for puzzles with them being hidden or in hard to reach areas

interaction with objects will include being to pick up most smaller objects and being able to throw them (and sometimes breaking them) when it comes to medium sized objects the player will be able to push and sometimes pull them to move them around to reach higher areas or to give them cover or to cross a gap

Communication will be handled between players by using text chat with different regions like global, local, alliance, guild and party for the communicating between the players on a world scale, a smaller local sort of area chat, alliance chat for raiding, a guild chat for chatting with your guild members and a party chat for those in your party

**3.2.5.** Combat will be real time in an open world

**3.2.6.**  The economy will deal with a tiered money system form lowest to highest being copper, silver, gold, and platinum each being worth 100 of the previous and will allow the player to purchase equipment and other goods. The player will also be able to sell what they find to NPCs to make money along with through quests, and the player will be able to make money by raiding the opposing sides settlements.

**3.3. Game Options**

The options will be limited to graphical, sound, and interface options these will not affect game play just how it looks and sounds.

**3.4. Replaying and Saving**

There is no replay as the game is an MMO but because it is in a constant state of change by the players decisions to build bases and raid each other the game should be enjoyable for quite a while and will allow people to come back to a fresh new experience.

The game will automatically save every time the players inventory is updated and there will be no save points to restore the player to if they want to reload.

**4. Story, Setting and Character** (Jordan Tuck)

**4.1. Story and Narrative**

“The Gods have died. Left abandoned by new ways and fallen faith, they have passed on from this world. If there are any of you left that are inclined to weep for them then don’t. You hid your faith and prayers from them while they were alive, you can hide your tears and grief from me now that they are gone. I have not come down from the heavens to console you for whatever you now realize you have lost. As Caretaker of the heavens; I have come to execute the last will of the Gods and divide the power of heaven amoung the mortals of this world.

“To the sun scorched people of the West, the Gods leave you their iron. It is their wish that you will use it to build tools and machines to subdue this inhospitable land and bring bounty and security to everyone. To the Eastern people of the frozen night, the Gods leave you their magic. It is their wish that you will bring enlightenment and peace to the world. In the land between you, the Gods have left all manner of beast, game, harvest, and challenge, so that warriors and farmers alike may prosper. It is the Gods wish that you use these gifts to share and trade with each other for the peace and betterment of all. They hope that in their passing they will finally bring the division of this world to an end.

“I however don’t give a damn and you can all tear yourselves to pieces. You have behaved terribly while the Gods were alive. I don’t expect you to behave any better now that they are gone. You do not deserve their legacy and inheritance. Your fates are in your own hands now, and I will not stand around to watch.

Farewell.”

-Divine servant Grhapa

**4.2. Game World**

**4.2.1. General look and feel of world**

**4.2.1.1 Bhavati :** World (divided)

Bhavati is a world of extremes, based on “[Eyeball planets](https://www.google.ca/search?q=eyeball+planets&tbm=isch)”. There is no day or night cycle so the “West” is a land of unbearable heat and constant daylight. The “East”, on the other hand is a frozen waste land of perpetual night. Life can survive between the two extremes, where the sun is low enough to not boil away the water and high enough to keep water from permanently freezing. These planets are also extremely close to their star and as such the sun would take up a full quarter of the sky.

Weather along the terminator, the border between day and night, would be extreme in every sense of the word. Hurricane force winds of both burning heat and freezing chill would pass constantly over the land. Storms would be torrential downpours or intense blizzards, or perhaps both at the same time dropping monstrous, and lethal, balls of ice from the sky. Towards either ends of the world, the weather will moderate to consistently hot or cold. The rivers of this land would only ever flow from East to West.

The habitable lands to the West would be bordered by salt flats and dunes. The temperature would be always hot and the sky always bright. Beyond this, the land would become unbearable and be dotted with ever more frequent volcanoes. At the edge of the livable area to the East, the temperature is always cold and sky as a deep twilight; technically called astronomical twilight. This region would be bordered by glaciers and snow drifts. Beyond this, would be a deeply frozen glacier marked with Ice Mountains and vast chasms.

**4.2.1.2. Resources and Conflict**

Bhavati is not only a world of divided resources; it is a world of limited resources. All things wear out and food must be regularly consumed. Players must continually forge for more items and food or perish. There are not enough resources in the world for either society to exist beyond subsistence. The Gods wish of each side cooperating and prospering cannot actually happen. If any side wishes to improve themselves it has to come at the sacrifice of the other side.

The Samvartaka have all the physical capabilities and weapons and would typically be considered tanks. The Himikaroti have all the magic and special abilities and would be considered glass canons. A direct confrontation between the two would result in either annihilation or stalemate. Each side requires the resources of the other to gain an advantage. The Samvartaka must acquire magic through trade or battle with the Himikaroti, and the Himikaroti must acquire armour and weapons from the Samvartaka. Only by combining both magic and metal will a player have the capability to defeat the other side.

**4.2.2. Areas**

**4.2.2.1. Upanta**: East/West divide and terminator (the land between)

This is the transition zone between the extreme heat and extreme cold. Farming can occur at either of its edges, but towards the mid-point, the weather and creatures become more extreme and hostile. Permanent settlements at the terminator must be constantly defended or repaired from the giant monsters roaming this territory and abysmal weather that bombards it. This area is predominatly mountainous forest.

**4.2.2.2. Maru:** Western lands (desert)

The western lands of Maru are a desert landscape of constant heat and daylight. The Eastern most vegetation of this region begins as scrub forests and grasslands. Eventually this will give way to cacti and succulents, and finally to barren desert and salt flats at the western habitable limit. Rivers here always flow from East to West and bodies of water become narrower as they approach the desert. The level of light will also increase as players venture westward; changing from late afternoon brightness to mid day brightness.

The temperature will also increase as travelers move from East to West. The Samvartaka have adapted to this land and as such can travel it freely. However a Himikaroti traveling in this area will need protection from both the light and heat. The amount of protection required will increase as they venture more westward. Himikaroti will also find their cold based attacks and defenses less and less effective the more westward they go. Similarly, the creatures of this region will be friendlier to Samvartaka and more hostile to Himikaroties the more westward one travels.

**4.2.2.3. Tusara:** Eastern lands (ice)

The eastern lands a Tusara are a glacial plane of constant cold and night time. The western most vegetation of this area starts as thin alpine forests and shrubs. This eventually changes to patches of wild flowers, weeds, and tundra. The western most edge of the habitable zone is bordered by snow and ice. This area is occupied by many cold deep lakes that are often ice covered. The light of this territory fades from a bright twilight at the western edge to astronomical darkness at the eastern limit.

The temperature also drops as players move eastward. The Himikaroti can travel freely in this area but the Samvartaka will require ever greater protection from the cold, and items to aid their vision, as they travel westward. The creatures of this region will also be similarly immune to the Samvartaka’s heat and physical attacks. As with their counter parts on the western side of the world, creatures here will be ever more hostile to the Samvartaka, and ever more friendly to the Himikaroti, the more eastward they travel.

**4.2.2.4. Out of Bounds Areas** (instances)

The uninhabitable areas of the western and eastern extremes can be reserved for instances and special missions to the races of each side. This means only the Samvartaka have access to special instances West of their origin point, and only Himikaroti can venture to the East of their origin point. These instances can be used to provide unique items for each race and can only be obtained by the opposing side through battle or trade.

To the Northern and Southern map edges, instances and special missions can be accessed by all players with increasing degrees of difficulty toward the terminator, and distance into opposing territory.

* 1. **Characters.**

**4.3.1. Samvartaka**: Western people (people of fire)

Adapted to the heat and exposed light, the Samvartaka (Sams) are tall and dark skinned with deep set eyes. Their easy access to the ground and mineral deposits have made their society develop around mining, metal weaponry, and tools. Because they have abundant light and energy, their sports and recreation are based around physical pursuits. The Samvartaka find strength from fire, light, and the earth. They are weak to cold, darkness, and water.

**4.3.2. Himikaroti**: Eastern people (people of ice)

From long exposure to cold and darkness, the Himikaroti (Hims) are short and fair skinned with large eyes. For them, the ground is constantly frozen and there is no light or heat. They have learned to draw in the natural energy around them and wield it as magic. Their society has developed around learning, and studying the manipulation of magic. Because of the lack of light and heat, their past times are centered on social engagements and storytelling. The Himikaroti find strength from ice, darkness and water. They are weak to heat, light, and earth.

**4.3.3. Divine servant Grhapa**: Servant of the Gods (caretaker)

As a habitual servant and last remaining immortal being in the world, Grhapa feels compelled to stay on and see the Gods final wish completed. If found he will be helpful but complain bitterly about it. He is resentful for the Gods leaving him stuck to finish the job they couldn’t do.

**4.3.4. Denizens of the world** (NPCs)

The inhabitants of world, both East and West, are symmetrical in their rolls and functions. They are only for support of the players and do not provide resources above basic needs and training. Food and items that provide bonuses most be obtained through farming, crafting, battle, or trading. To add newcomers to the game; the population of NPCs at the origin point is greater than further toward the opponents territory. This can be achieved by having NPCs killable by the other side and must be escorted into more hostile territory to replenish lost numbers; spawning only at the origin points.

There can be three classes of NPCs: Farmers, required for maintain fields and providing basic food supplies, Smiths and Crafters to building basic weapons, armour, and items, and finally trainers to aide leveling.

**4.2.5. Mobs of the world** (PvE)

The creatures of the world are primarly to provide basic combat and base material drops. In very rare cases exotic drops can be obtained. But to maintain and interdependence on friendly players, and a source of conflict for opponents, exotic items should be a rare bonus in the wild. To facilitate new players, mobs should be small and weak while at close proximity to the origin point, and grow in size and difficulty towards the terminator (halfway point). Mobs on the opposing side of the terminator will be weaker to players of their side (ie fire mobs weak to Sams) but stronger members of the other side (ie ice mobs stronger to Sams). The only way a player can defeat a mob is to use weapons or magic that originated from the same side as the mob.

**4.2.6. Weather of the world** (PvW)

As players get closer to the terminator, the weather becomes more extreme and deadly. This can take the form of torrential rains or blizzards that damage crops; winds that destroy structures, and temperature changes that can boost or weaken players. Perhaps a mechanic can be created where the weather can be predicted to a certain degree, allowing coordinating attacks, missions, and raids, with the timing of the weather.

**5. Level** (Chad Bissonnette)

For our game, it does not have levels per say as it is an open world area but, it does have different locations within it that play a key role in the story. The planet itself is named Bhavati and it is based on an “eyeball planet” Due to the planet having no day and night cycle, the complete western half of it is covered in fire and flames and is the home of the great volcano. It is inhabited by the Samvartaka being the people of fire.

Of the complete eastern half of the world, it is the opposite. It is covered in ice and is home to the icy mountains and Mount Glacier; a once beautiful volcano turned to ice a long time ago when climate on the planet became this way. It is inhabited by the Himikaroti being the people of ice.

Between the two areas is the middle ground. The lone part of the planet that is neither covered in ice nor burning in a fiery rage. Upanta is the ideal location for farming materials as it has the best conditions for all agriculture. It is the spot in the world that is not only the best for materials but, it is also the most dangerous aspect by a long shot. Being right in the middle of both, it can also be a battleground at times.

Both the Samvartaka and the Himikaroti people tend to fight over the land to see which people will control it. Upanta is also the only area where neither people are at disadvantage. The player could decide to go into enemy territory to strike a deal without the use of brute force but, this is very risky. In the east, the ice people are very weak do to the intense amounts of heat that they are not use to. In the west it is the opposite, the people of fire are weak due to the intense drop in temperature.

That being said, each group is much stronger in their areas, and this could lead to an easy by some very untrustworthy members of the opposite race. Sometimes you may need materials from the other race. Like mentioned before, you could choose to strike a deal with opposing players in order to get the resources or you could use strategy and take them by force. Luring players into your environment would be a key example of a way you could accomplish this. You bring a player into an area where they are weak to kill them much easier to gain their materials.

Upanta has several more reasons for being by far the most dangerous place on the entire planet. Aside from it being the middle ground, it is also the only point in the whole world where neither race is at a disadvantage. Both races have normal power levels here and they are frequently put on display when trying to obtain the other groups farming materials and area.

Before either race even has the chance to make it to the opposing half though, they must go through the “Abyss”. The absolute center of Upanta, this area is home to some of the most dangerous and hostile creatures known to the planet. The creatures not only hit like trucks but, can tank some hits too. Crossing through this zone unprepared or unaware of what you will encounter with almost guarantee you’ll be respawning at your base in no time. To go along with these very strong creatures, the “Abyss” is also home to some of the most dangerous weather conditions.

Being in the direct center, the weather can range from strong hurricanes to fiery tornadoes. In the very odd chance, the player could witness a phenomenon that few have ever witnessed but, it’s also one that most people won’t want to see. When the temperatures of both sides clash in the center of the “Abyss” at the right time when a hurricane and fiery tornado cross paths, the two will create a vortex of ice and fire destroying absolutely everything that stands in its way. If at any point a player is caught within this vortex, there is no escaping it and the player will be torn to shreds and sent back to the respawn area. In the odd chance that the player manages to survive all of this, they will still have to deal with the creatures that were strong enough to survive the storm as well.

The toughest of these boss-like creatures being the abyssal demon is one that no player can defeat alone. If attempted without some sort of squad or preparation, the player will not last very long. If the player feels extra risky, the best way to beat it is to team up with not only member of your own race but, members of the opposing race too dealing multiple types of damage. Once defeated, the loot can be split between the groups but, it may not stay in your inventory long. If feeling gutsy, the players of the opposing team could take advantage of your low health and take it all for themselves.

**6. FTUE** (Meet Shaileshkumar)

In the beginning of the game, Player is unknown from game controls and strategies. So, at the starting, UI guides and teach the player for game as like game controls, game concept, game story and game’s main objectives. UI introduce the player to controls each button’s work for playing a game and UI guides the player on different levels to complete the game objectives.

**7. Interface** (Matthew Shea)

**7.1.** The HUD will display the players currently selected skills along with the players health, mana, and stamina bars. It will also display a compass and a map along with showing chat and showing the party’s status bars. The final thing it will show will be the status effects currently effecting the player.

The skills and their cooldowns will be on the bottom in the middle of the screen. The status bars will be in the top right with the party’s bars just below that but in-between will be the status effects. In the bottom left will be chat and in the bottom right will be a map and compass. All these items will be toggle-able in the options.

The way that the HUD looks will depend on the race that you chose. If you choose Samvartaka it would have a metallic redish look to it and if you choose Himikaroti it would have a more magical

**7.4.** The help system will include tutorial like NPCs to teach the game and if any extra help is needed the player can redo these quest at any time.

**8. Artificial Intelligence** (Meet Shaileshkumar)

**8.1. Opponent and Enemy AI:**

Every player’s have different specific ability and strategy to conquer the enemy & opponent player. Therefore, each player has its own AI which is related to its kingdom ability for playing game and get victory. AI have its own ability to control the game and play which help the player to play game with good strategy and decision.

**8.2. Non-combat and Friendly Characters:**

In the game, some players are friendly and supportive. So, that types of players, main player requires deferent strategy and decisions which take by artificial intelligence and player get benefit from them to win its game.

**8.3. Support AI:**

In the game there is one AI who controls the game flow, players and game strategies which uncontrollable by player and this AI pop-up when player goes to wrong direction of game flow. So it gives direction & suggestion to the player for go to right way and tackle the difficulties of game level by hint as well as this supportive AI always track the player’s game play as well as player’s game achievements and data.

**9. Technical** (Jordan Tuck)

**9.1 Target Hardware**

The target platform should be the PC as it is still the most popular platform for games. Hardware for the game should include a minimum DirectX 11.2 compatible graphics interface. Developing for DirectX 12 would be preferred; however adoption of this standard still remains low. A 3D sound supported Audio interface is also essential. Minimum requirements for RAM and Hard drive storage of the game should be similar to that of Windows 10 recommended requirements.

**9.2. Development System**

Little has been done in the field of game engine design to support MMO’s “out of the box”. Most modern MMO’s use either a purpose built game engine, or greatly customized version of popular game engines. In that vein, the development platform should be one that is first and foremost customizable. The Unity engine would best suite this requirement as it is not only open source; it also integrates easily with many open sources graphics and development tools.

Regardless of the platform ultimately decided for the client software and interface, it should be noted that an MMORPG will require considerable development on the server side as no premade solutions exist outside of database engines and web servers.

**9.3. Network Requirements**

A highly rendered game with many NPCs, mobs, and real-time weather effects, as well as players, will require a significantly high base bandwidth. It is difficult to tell at this early process of design, but a 5Mbs internet connection seems a reasonable recommended requirement.

**10. Game Art** (Chad Biossonnette)

Game Art- With this type of fantasy game, the game art should be as realistic as possible.Adding scenic vistas throughout the world will not only make the game look better but, people will feel the need to explore the world in depth. Also, giving the player such a realistic landscape will give them a chance to put aside all the chaos briefly to take in the world and its beauty. Putting more detail into the game art will also aid with marketing for the game. For a lot of people, a more realistic looking game will look more appealing compared to a game with less artistic styling.

When it comes to the immense amount of fire and ice scattered across the halves of the world, the levels of realism need to be high to add extra detail to make the landscape stunning. When walking through the icy paths, the ice should have a glisten to it as well as a realistic texture. When it comes to the half of the world covered in fire, the different colours of the fire should be obvious. Also, the flames movements should be realistic as well to get a true feel that the world around you is a barren wasteland of fire. The transition zone in between both areas should be the most appealing part of the map. The majority of farming is done in this area meaning it doesn’t look like a complete disaster zone well, at least it won’t the majority of the time.