**First Draft**

**Defenders of Ragnar**

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# Section I - Game Overview

## Game Concept

Defenders of Ragnar is a strategic Tower Defence game, roughly based on UO:Defender, which is itself based on Ultima Online.

The game uses a top-down isometric tile-based view with 2D animated sprites for towers and enemies. The mouse will be the main input method, with a few keyboard shortcuts.

The main objective of the game is placing "towers" that will attack enemies coming down a path to stop them from coming through. Success is achieved by proper strategic placement of towers, and the game is lost by having too many enemies make it through the game area.

## Design History

Initial Version

## Genre

Tower Defence

Medieval Fantasy

Strategy

## Target Audience

Tower defence players. UO:Defender players.

## Game Flow Summary

The player starts at a menu screen which includes level selection. Clicking on a level option starts said level.  
  
Within the level, the player must make it through a set number of waves to win the level. A wave ends when all enemies are dead or walked off the game board.

Winning, losing, or quitting will return the player to the menu.

## Look and Feel

The game is 2D and isometric tile based. The theme is medieval fantasy, and the art style is simplistic.

## Project Scope

A summary of the scope of the game.

### Number of locations

Forest level

Cemetery level

Beach level

Mountain level

### Number of Enemies

Roughly 40

### Number of Towers

Roughly 20

# Section II - Gameplay and Mechanics

## Gameplay

The player will progress through levels by clearing enemy waves, earning gold, and experience points.

Gold is used for purchasing additional towers and upgrading existing towers. Existing towers must have reached an experience threshold before upgrading.  
  
Once the player has upgraded a tower to grandmaster rank, a corresponding prestige class tower will be unlocked and available for purchase.

Clearing the last wave of a level wins said level.

## Mechanics

### Tower Types

The game has two base tower types, Club warriors, and Novice wizards. The warriors can be upgraded to a weapon type, and wizards can be upgraded to an element type.

Once a weapon type or element is selected, a tower can rank up with that specific weapon or element.

Warrior type towers go from Club Warrior, to Warrior, to Master, to Grandmaster.

Wizard type towers go from Novice, to Apprentice, to Master, to Grandmaster.

Prestige class towers mix weapon types with element types.

Warrior and prestige towers have a range of 1 tile, while wizard towers can have a range of 2 or 3 tiles.

### Warrior Towers

#### Club

Clubs are only used by the base type warrior tower. They do moderate damage with moderate swing speed with no special features.

#### Sword

Swords are the raw DPS option. They do moderate damage, but with fast swing speed.

#### Axe

Axes do moderate area of effect damage with moderate swing speed. An axe warrior’s attack will damage enemies near the target as well as the target.

#### Mace

Maces do moderate damage with moderate swing speed but will stun enemies on hit.

### Wizard Towers

#### Ice

Ice wizards have a range of 2 and will slow enemies down on hit.

#### Fire

Fire wizards have a range of 2 and do area of effect damage.

#### Energy

Energy wizards have a range of 3 and do high damage.

#### Poison

Poison wizards have a range of 2 and poison enemies, causing damage over time.

### Prestige Towers

#### Ice Sword

Ice sword towers have the properties of sword towers, and slow enemies down on hit.

#### Fire Axe

Fire axe towers behave like axe towers while dealing more damage

#### Energy Mace

Energy mace towers behave like mace towers while dealing more damage

### Tower Management

#### Inspecting Towers

Mousing over a tower will highlight the tiles within the tower’s attack range.

#### Placing Towers

If the player has enough gold available, they can click on a base tower button or prestige tower button to begin the process of placing a tower.

Once the button is pressed, the game will begin giving the player special feedback when mousing over tiles. If the tile moused over cannot have a tower built on it, it will be highlighted in red. If the tile is buildable, a 3x3 or 5x5 square of tiles will be highlighted matching the desired tower’s attack range if built in said tile.

Clicking on a valid tile at this stage will build the tile and deduct gold, while pressing the Escape key will abort the tower placement process.

#### Upgrading Towers

Once a tower has reached its experience threshold for its next upgrade, it will be highlighted to demonstrate that it is ready to upgrade.

Once clicked upon, a small menu will be displayed near the tower displaying upgrade options. Clicking on an option with enough gold will close the menu and upgrade the tower. Mousing away or hitting Escape will close the menu.

### Buttons

#### Tower Buttons

There are 5 tower selection buttons in total. Two for the basic tower types (Club warrior and Novice wizard), and three for the prestige towers (Ice Sword, Fire Axe, Energy Mace) which will only function once unlocked.

#### Wave Start Button

A button is available in between waves to start the next wave.

#### Volume buttons

Music and sound effect volume buttons are available for increasing or decreasing music and sound effect volume.

### Combat

Enemies in this game don’t actually attack. They challenge the player through speed, numbers, and resilience. When able, a tower will attack whichever enemy within its range is further along the path. After attacking, a tower must wait a given period of time before being able to attack again.

### Economy

The player earns gold by killing enemies. Stronger enemies give more gold. Gold is spent on purchasing towers and upgrading towers.

## Screen Flow

### The screen stays in a fixed position at all times. The window size is big enough to encompass the entirety of the game board during play, and the menu is the size of the window.

### Screen Descriptions

#### Main Menu Screen

The main menu includes level selection, game quitting, and any future options.

#### Game Screen

The game screen has the game board in the center, with a small menu with buttons at the bottom.

#### Pause Screen

The pause screen is an overlay with text on top of the game screen. The game is paused while the pause screen is active.

## Easter Eggs

While the game has no actual hidden content, it has references to other video games.

The Timber wolf and Grey Wolf enemies are references to Ultima Online.

The “energy” element is also a reference to Ultima Online.

The Sea Dog enemy is a reference to a “salty sea dog” pub in Ultima, and also a pub of the same name that happens to be next to my house.

The medusa enemies are a reference to Castlevania’s floating medusa head enemies.

# Section III – Story, Setting and Character

## Story and Narrative

Specific details like scripts and cut scenes may not be in this document but be in the Story Bible.

### Back story

### Plot Elements

### Game Progression

### License Considerations

### Cut Scenes

#### Cut scene #1

##### Actors

##### Description

##### Storyboard

##### Script

#### Cut scene #2

etc.

## Game World

### General look and feel of world

### Area #1

#### General Description

#### Physical Characteristics

#### Levels that use area

#### Connections to other areas

### Area #2

etc.

## Characters

### Character #1

#### Back story

#### Personality

#### Look

##### Physical characteristics

##### Animations

#### Special Abilities

#### Relevance to game story

#### Relationship to other characters

#### Statistics

### Character #2

etc.

# Section IV – Levels

## Level #1

### Synopsis

### Introductory Material (Cut scene? Mission briefing?)

### Objectives

### Physical Description

### Map

### Critical Path

### Encounters

### Level Walkthrough

### Closing Material

## Level #2

etc.

## Training Level

# Section V - Interface

## Visual System

### HUD - What controls

### Menus

### Rendering System

### Camera

### Lighting Models

## Control System

How does the game player control the game? What are the specific commands?

## Audio

## Music

## Sound Effects

## Help System

# Section VI - Artificial Intelligence

## Opponent AI

The active opponent that plays against the game player and therefore requires strategic decision making (example, Civilization or Chess, how is it to be designed?

## Enemy AI

Villains and Monsters

## Non-combat Characters

## Friendly Characters

## Support AI

### Player and Collision Detection

### Pathfinding

# Section VII – Technical

## Target Hardware and operating system

## Supported game controllers and peripherals

# Section VIII – Game Art

Only show concept art here (rough sketches)

## Concept Art

## Style Guides

## Characters

## Environments

## Equipment

## Cut scenes

## Miscellaneous