

SE 3190 Midterm Project Proposal: Team #19

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1. Introduction

1.1. About Student #1

Nathaniel is a sophomore in Software Engineering. He has professional experience developing web applications using technologies such as JavaScript, HTML, CSS and C# (.NET).

More recently, his professional focus has shifted entirely to backend infrastructure concerns. This includes the design and development of Web APIs, cloud infrastructure, and IoT messaging systems.

1.2. About Student #2

2. Purpose

Trying to keep your mind stress-free while waiting for something personally significant to occur can be challenging, sometimes the most effective way to reduce stress is by engaging in a healthy distraction.

Simple, browser-based games can be an enjoyable way to spend time while sitting in a waiting room or attempting to clear your nerves before an important presentation. For example, waiting at the doctor's office or taking a small break right before you deliver a stressful update on your project at work.

3. Goals and Objectives

3.1. Our Goal

To develop an entertaining browser game that will provide a small (non-addictive) distraction to players. I.e. provide a small dose of joy to ease the mind before a potentially stressful event.

The game should be interactive and simple. It should also support player personalization and recognition of player achievement.

3.2. Objectives

1. Develop an interactive space travel game where the user provides input through their keyboard to direct a spaceship through a field of asteroids.
 - i. Users will navigate their ship by pressing the right and left arrow keys.
 - ii. Users can shoot at the asteroids to destroy them, by pressing the space key.
 - iii. The game ends when the ship is struck by an asteroid OR 5 minutes has elapsed.
2. Develop personalized player experience.
 - i. Allow users to create a custom user profile and upload a photo of themselves on a "profile" page.
3. Develop a leader-board page where users can view their 10 highest scores. (Recognition of player achievement)
4. Develop 4 web pages:
 - i. A main/central page with information about the game and links to the 3 other pages.
 - ii. The game surface page, where the user plays the game.
 - iii. A profile page where the user can view and edit their profile information.
 - iv. A leaderboard page where users can view their top 10 highest scores.

4. Project

4.1. Description

The game will be a "space invaders" style shooter where the user directs their ship with the right and left arrow keys, clearing the asteroids from the ship's path.

4.2. Wireframes

4.3. Images

5. Resources

6. Future Work

7. Final Comments