

Astunc Final Report

Implementation

During implementation we had a few problems that caused us to change our design. Because of this there are minor changes in design for example File Manager part that is in our design has been changed slightly and a separate high score controller has been added. We also changed the names of some classes from our design to make our code more understandable for example File Manager to Data Manager since this class manages player data and high score data. Mostly the power up system was the source of the problems so we first decided to reduce the amount of available power ups but after that we decided to not implement it altogether at this time to focus on more core features of the game. Another issue was that the animations were becoming too cumbersome for our game and causing performance issues, slowing the game down too much. We solved this problem by increasing the step size so that we show less animation but the performance is improved greatly. Current status of the implementation is: Core gameplay and features like settings and high score system is done power up system is not implemented currently.

User's Guide

1) Introduction:

Astunc is a bullet hell type of game. Bullet hell is a subgenre of shoot them up games. The main objective is to destroy the enemy entities on screen with the projectiles from user. Usually these games are set on space. We can describe this kind of game as Chicken Invaders with more projectiles on screen that limits the movement of the player.

2) System Requirements and Installation:

System Requirements

The Standard Java Runtime Environment (JRE) is required in order to play.

Minimum system requirements:

- Windows 2000/XP
- 128 MB of RAM or higher.
- Screen resolution: 800*600.
- Integrated graphics card.

Installation

1) Run astunc.jar file to execute the game (**recommended**).

2) If you are able to use a Java IDE, compile the codes and run the main method. The console will open and the game will start.

3) Game Overview:

Game Objects

Player: Player will be presented as a spaceship on screen, the spaceship will be able to shoot projectiles that have blue glow. The projectiles will be able hit and destroy normal enemies in two shots. Player's objective is to destroy every enemy entity.

Normal Enemies: Normal enemies are encountered from the start of a stage until the boss enemy is encountered. Normal enemies are slightly different depending on the stage player is on. Player is able to destroy each normal enemy in two successful shots

Boss Enemies: Boss enemies are encountered after all of the normal enemies in a stage are defeated. Boss enemies are larger and take more than two shots to take down and have bigger and more complex projectile patterns. Defeating a boss enemy means that a stage is completed and player can move on to the next stage.

Score

Scoring in Astunc is very straight forward. There is no way to gain score in this game. Ranking will be determined with the time spent on the game. So lowest time will be displayed at the top of the ranking system.

Controls

Default Keyboard Controls are: Arrow keys for movement up, down, left and right. Spacebar to fire and Esc to pause the game.

4) Game Screenshots & Menus:

Main Menu

This is the Main Menu of the Astunc, this is the screen after running the game. In this menu user will be able to perform 5 actions. “Play Game” button will start the game with the default settings if user haven’t changed them. “Tutorial” button will start the tutorial session.

“Settings” button will lead user to another menu with variety of options to change some parts of the game. “High Scores” will display the highest scores which is achieved by completing the game. And at last “Quit” button will close the game.



Figure 1 - Main Menu

Settings

If user presses the Settings button from the Main Menu, user will face with 4 different options. In the row of “Change Player Name” string there will be default names and by pressing the default names provided by the game, users will be able to change their names simply entering the desired string with a certain length. By clicking the arrows near the number which is in the same row with “Change Volume” string, user will be able to change the volume of the game. “Change Spaceship” will lead user to another screen and user will be able to choose different spaceships. “Change Key Bindings” will also lead user to another screen to allow her/him to adjust the keys s/he wants to play.



Figure 2 - Settings Menu

High Scores

If user chooses the High Scores from Main Menu, user will see the first 5 best scores in the game. Display is very straightforward, the names and the scores will be displayed in a 2 different columns and the highest score will be on top. If there is no score to show, there will be a string which says "There is no completed game available". In this page user's only interaction will be the "Okay" button. After pressing it user will be directed to the Main Menu.



Figure 3 - High Score Screen

Pause Menu

This is the screen which will be displayed when user presses the “Esc” button (by default) to stop the game. Pressing this button will stop the game and display some kind of a menu to user which contains only two options. “Continue” button returns the user to the game where s/he stopped it, with a countdown from 5 to allow user to prepare. “Main Menu” button will quit the running game at will return user to the Main Menu of Astunc. After pressing the “Main Menu” button user will lost all the progress of the current game.



Figure 4 - Pause Screen