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Game Design Document

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L4 GDV

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BONAFIDE CERTIFICATE

This is to certify that this record of course work is a bonafide work done by **Ajil Padathuparambil Pappachan**, ID No.: **2018UG03077**, in partial fulfillment of requirements for the **1st year B.Sc. Game Programming** during the academic year 2018 – 2019 and is the original work of the candidate.

Submitted for the **Data Analysis and Visualization** module assessment held on \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

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**Verified By Staff In-Charge**

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# Introduction

**Phoenyx** is a 2D Retro Game which was created as an Output to the L4 GDV, DAV Module.

# About Game

Phoenyx is a 2D retro game which takes inspiration from the retro game, Centipede, which was released for Atari in 1980. Most of the core mechanics of Pheonyx are similar to that of Centipede. However, some modifications were made. Players take control of a phoenix and try to survive the attack of oncoming enemies.

# Game Overview

The player takes control over a phoenix, who is trying to survive the onslaught of incoming attackers. Similarly to Centipede, Player must evade incoming attacks, while also attacking back. Difficulty of the game increases with passage of time. Score is calculated based on the survival time and number of enemies killed. Various power ups are generated randomly to assist the player.

# Why this Game?

After Initial Pitch presentation of various ideas, Phoenyx was finalized because of its originality and more intimate relationship with the core mechanics of Centipede.

**Game Logic**

* The Game starts with the Player avatar at the centre of the game screen. Player can move his/her avatar in all eight directions.
* Enemies are generated randomly at either side and outside of the screen and start moving into the game screen. Enemies attack the player based on their type.
* Other obstacles include birds and airplanes which move into the game screen horizontally and vertically respectively.
* Power Ups are generated randomly at any point of the screen.
* Player loses a life when he/she is hit by an obstacle or enemy attack. Player can have a maximum of six lives. If all the lives are over, the game ends.
* When the game is over, score is awarded based on the amount of survival time and the number of enemies killed.

# IDE Used

All of the Programming for the game was done with **C++** on **Visual Studio Community 2017** IDE.

# Hardware Specifications

The Game works fine in lower end systems. However, the following specifications are recommended:

**Intel i3-3300 @3.3 GHz**

**4 GB RAM**

**Nvidia Geforce GT 210**

**500 GB HDD**

# Target Platform

The Game can be played in any PC or Laptop which have a Windows 7, Windows 8, Windows 8.1 or Windows 10 Operating System

# Assets Used

The Art and Animation (Sprites) for Characters, Background and Effects were created by **Dev B Raj**, who is currently studying **Bsc. Game Design and Development** at **ICAT Design and Media College, Bangalore**.