# Custom Program Plan

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1. Provide a summary of your program, maybe write up a paragraph or two to describe what does it do? What are some of the key features etc.

This program is an action game that has the user controlling an object to dodge incoming obstacles. If hit even once, it’s game over and they will need to retry. There are various stages of increasing difficulty and in order to clear each stage, the user must survive for 60 seconds. There is somewhat of a high-score system with the time, as the user can go past 60 seconds and see just how long they can survive in the stage.

1. Drawing a picture of what you want it to look like, sketch the first few interfaces that will be shown when the program is run.

Interface when program is first run

A screenshot of a video game

AI-generated content may be incorrect.

Selecting the stage

A screenshot of a video game

AI-generated content may be incorrect.

Gameplay

A blue hexagon with white text

AI-generated content may be incorrect.

1. List and describe some of the main data types:

|  |  |  |  |
| --- | --- | --- | --- |
| Field Name | Data Type | Description | Example of value |
| survivalTime | float | A tracker of how long the player has survived in the stage | 10.3 seconds |
| isAlive | bool | A check that determines whether or not the user is still alive or has hit an obstacle | False |
| maxFramesPerSecond | int | The maximum frames per second the game will run at | 60 |
| playerX | int | The x coordinate of the object’s position (player) | 450 |
| playerY | int | The y coordinate of the object’s position (player) | 202 |

1. Describe the main functions and procedures. Have enough that you can start to see how the program will continue to develop as you progress. (eg: initialize, draw, update etc)

|  |  |
| --- | --- |
| Function /Procedure/Method | Description |
| InitWindow | Creates the window of the game |
| IsKeyDown | Recognise user inputs to move the object |
| BeginDrawing | The “paintbrush” used to create shapes |
| DrawRectangle | Draws a rectangle |
|  |  |