**CSE 310 – Applied Programming**

**Module Plan**

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| **Date:** | 4/24/2023 |
| **Teacher:** | Brother Pineda |
| **Module # (1-6):** | 1 |

1. Identify which module you have selected to work on. Place an “X” under the “Selected Module” column.

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| **Modules** | **Selected Module** |
| Cloud Databases |  |
| Data Analysis |  |
| Game Framework | X |
| GIS Mapping |  |
| Mobile App |  |
| Networking |  |
| SQL Relational Databases |  |
| Web Apps |  |
| Language – C++ |  |
| Language – Java |  |
| Language – Kotlin |  |
| Language – R |  |
| Language – Erlang |  |
| Language – JavaScript |  |
| Language – C# |  |
| Language - TypeScript |  |
| Language – Rust |  |
| Choose Your Own Adventure |  |

1. At a high level, describe the software you plan to create that will fulfill the requirements of this module. This may change as you learn more about the technology or language you are learning.
   1. I plan to create a simple game using the “MonoGame” C# game framework.
   2. This game will be a side scrolling infinite runner game.
   3. There will be only one input: a jump button.
   4. I will add music and sound effects for my stretch challenge.
2. Create a detailed schedule using the table below to complete your selected module during this Sprint. Include details such as what (task), when (time), where (location), and duration. You are expected to spend 24 hours every Sprint working on this individual module and other activities in the course. Time spent on this individual module should be at least 12 hours.

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|  | **First Week of Sprint** | **Second Week of Sprint** |
| **Monday** | Display player and road | Let the player die |
| **Tuesday** | Add physics to player | Make a start menu |
| **Wednesday** | Make sure player doesn’t fall through the road | Display the score |
| **Thursday** | Let player jump with a user input | Make sound effects |
| **Friday** | Generate obstacles | Save highscore to a file |
| **Saturday** | Make obstacles move toward the player, faster and faster the longer the game is | Catch up (maybe add player animations?) |

1. Identify at least two risks that you feel will make it difficult to succeed in this module. Identify an action plan to overcome each of these risks.
   1. The first risk that might make this project difficult is getting too ambitious and trying to add too many features to the game. To overcome this risk, I will strictly stick to my plan and make sure I don’t get behind. I will also try to get the easiest solution done first, before making it more complicated.
   2. The second risk that I might have would be struggling to organize my code. To overcome this risk, I will write out an organization plan using functions and classes and implement the plan when I code.