**Section 1: Metadata**

*to be filled by the student*

**1.1. Project Information** to be filled by the student

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| Title: Xenzia | |
| Section: L1 | Instructor: Nadia Nasir |

**1.2. Student(s) Information**

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| Name: Huzaifah Tariq Ahmed | ID: ha07151 |
| Section: L1 | Batch: 2025 |

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| Name: Syed Hammad Razi | ID: sr07128 |
| Section: L1 | Batch: 2025 |

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| Name: Muhammad Shaheer | ID: ms07552 |
| Section: L1 | Batch: 2025 |

**Submission guideline:** Save your project proposal as a pdf file and rename as Project Proposal\_L1\_ProposedTitle where L1 is to be replaced with your section

**Section 2: The Project**

*to be filled by the student*

**2.1. Project Description:** *Please provide a brief introduction of the project including its scope.*

In this project, our goal is to make our own version of the famous game ‘Snake Xenzia’ in which a snake is trapped inside a walled square area and some food is randomly placed inside the square region which the snake has to eat by moving itself in the position to eat it using the arrow keys.

The rules of the game are as follows.

* As the game starts snake is of a very small size and using the arrow keys the player has to direction the snake towards the food so that he eats it and the size of the snake increases.
* As more and more food get’s eaten by the snake, more and more points are achieved by the player.
* If the player directions the snake in such a way that the head of the snake get’s in contact with the snake’s body, the game gets over.
* If the snake’s head comes in contact with any of the 4 walls on each side, the gets over.
* The game isn’t about winning. It is just about how many points are collected before the player makes a mistake and the game ends due to the above two rules.
* However, if a player plays so well that the whole square area gets filled up with a snake’s body as he grows so much, the player will have mastered the game.

**2.2 Functional Requirements**

*This section describes each function/feature provided by your Gam/App. These functions are logically grouped into screens based on their purposes..*

**Module 1: Splash screen**

• There will be a splash screen with music in the background that displays all the characters and show how the game will look like.

• User can press enter to move to the game instruction screen

**Module 2: Instructions Screen**

• This Screen will show the Instructions that the User should Follow to play the game.

• These Instructions include keys to use and instructions on how they can score more points etc.

• A Play button to launch the game

**Module 3: Game Play Screen**

• As the game begin the birds and plane start appearing on the screen the user will be able to move the plane up/down to avoid hitting the birds

• Whenever the Plane hits the bird the plan crashes and score is decreased to -5.

• There will be a timer and score (100 in start ) shown on the screen that is decreased when ever the user hits the bird.

• User will win the game if he/she is able to maintain the score above 70 till the timer ends (3 mins).

**2.3. Planned Schedule:** *Kindly list the start/end dates and the timeline for the achievement of any intermediate milestones and the expected contribution to be made by the participant(s).*

Work will be equally distributed among all members (Huzaifah, Hammad & Shaheer).

Week 1: Blueprint of the game, classes’ definition, object assignment. (October 31 – November 4)

Week 2: Logic making, functionality definition, basic SDL structure. (November 7 – November 11)

Week 3: Troubleshooting and final GUI. (November 14 – November 18)

Week 4: Any remaining work. (November 21 – November 25)