ECS657U / ECS7003P Multi-platform Game Development

Coursework 1: Prototype

Group Submission

Your **group** should complete this form. **A copy** should be included in **each group member’s** submission via QMPlus.

# Group

* **Group Letter**: PP1.1 H
* **Group Name**: Pixel World Game Inc.

## Group Members

|  |  |
| --- | --- |
| **Student Full Name** | **Github username** |
| Ruihan Zhao | RuihanRZhao |
| Zohaib Ahmed | Zoincc |
| Xinyue Hui | Hui0427 |
| Chin Wing Lam | Chinwing |

# External links

* **Unity Project** Github repository URL:
* **Web-GL build** URL hosted on Github Pages:
* **Gameplay video** URL:

# Prototype

* **Game concept chosen**: PP 1.1
* **Game title**: Pixel World

## Game concept changes

* Win condition
* Survival challenge (last point pp1)

## Intended player experience (Xinyue Hui)

Describe in 1-2 sentences.

Survival Stress:

In meeting the survival needs of their characters, players experience the tension of limited resources and the pressure of strategic planning. For example, the player ensures that the character regularly receives what he or she needs to survive by growing food.

Construction Achievement:

By building infrastructures such as oxygen generators and storage facilities to expand the base, players feel a sense of achievement as they progressively develop.

Adventure Experience:

The game's adventures in uncharted areas are full of uncertainty and inspire curiosity in the player. Thus, players experience the excitement of exploring and discovering new resources by digging into unknown areas.

## Game environment features (Chin Wing Lam)

Describe the environment implemented.

It will be a plane world containing different biomes with their own features and unique resources for player to explore. With noise function, different terrain will be generated. With these resources, players can craft out necessities for them to survive and win the game.

## Player control features (Zohaib)

Movement:

Directional Movement: The player can move in all directions using the keyboard (WASD). Forward, backward, and strafing (side to side) movement is allowed.

Rotation: The player can rotate their view left and right, adjusting their perspective within the game world.

Jump/Climb: The player can jump over obstacles to explore the environment.

Crouch/Stealth: For sneaking around enemies or avoiding threats, the player can crouch, moving quietly and reducing detection.

Interaction:

Collecting Resources: Players can interact with objects in the environment to gather resources (e.g., chopping wood, mining stone, or harvesting food).

Inventory Management: The player can open and organize their inventory, choosing items to use or combine for crafting. The inventory screen is accessible through a specific key (e.g., 'I').

Combat:

Attack/Defend: The player can engage in combat using different types of weapons or their bare hands. They can block or dodge enemy attacks, depending on the combat system.

Weapons and Tools: Players will switch between tools and weapons using number keys or a quick-access bar for faster interaction during combat or resource gathering.

Survival Needs:

Health and Hunger Management: The player will monitor their health, hunger, and thirst using UI indicators. Healing items can be used through inventory controls, while food can be consumed to satisfy hunger.

## Other features (Ryen)

* 2 kinds of agents (player and clone)

## Expected marks:

* **Effective Prototyping**: 100% (out of 100)
* **Implementation**: 100% (out of 100)
* **Project Quality**: 100% (out of 100)
* **Gameplay Video**: 100% (out of 100)