WELCOME TO ABOVE THE GRAVE...

Above the Grave is an AR mobile card game:
1. Trading card game similar to games such as Pokemon or Yu-Gi-Oh.
2. Will be able to battle opponents and look to obtain new cards to build collection.
3. Utilizes a phone camera to show characters/actions/animations all within the rules of its trading card game elements.
4. Allowing for each trading card will come to life in our app and will visualize to the user their choices within the game.
5. How will we create ?
   - Will use Unity Real-Time Development Platform.
   - Will mostly be written in languages such as C#.

01

FUNCTIONAL REQUIREMENTS

01

Game Navigation/ Sign in

Pre- Must have installed Application.
Post- Prompted to enter User Preferences.

02

Loading into Game

Pre- Camera Access has to be granted.
Post- Directed to game menu.

03

View card

On Main menu there will be a "View Card" option. Will be able to view entire card collection.

04

View/Change Options

Located on Main Menu, will allow user to toggle system preferences.

05

Select Card

Before entering game, user will be prompted to select a card. User will then put image in front of camera and wait for opponent.

06

Battle UI

The user will be able to see stats such as health change and different moves to use.

07

Victory/Lose Condition

When a users health is fully depleted both users will be shown whether they won or lost.

02

NON-FUNCTIONAL REQUIREMENTS

Efficient Loading

01

App must load efficiently. All game menu UI functions should be able to boot in less than 500 ms.

Useful Notifications

02

User should have the option to see when new cards/features are added to the game.

Network Security

03

The app will be protected from misuse or cheating with any online aspect implemented into the game.

User data/Card collection Privacy

04

All user data will be encrypted to protect their card collection and data.

EVOLUTIONARY REQUIREMENTS

01

Sound Effects in Battle UI

Each move/attack will come with a certain sound effect. The user needs to have a card already selected, and join the Battle UI. The user then must make a move/attack for sound to occur.

02

Battle UI Sound Effect Speed and Duration

Sound Effect will occur almost immediately after the user makes a move/attack, and must end before the player makes their next move.

USE CASES AND USE DIAGRAMS

Above The Grave
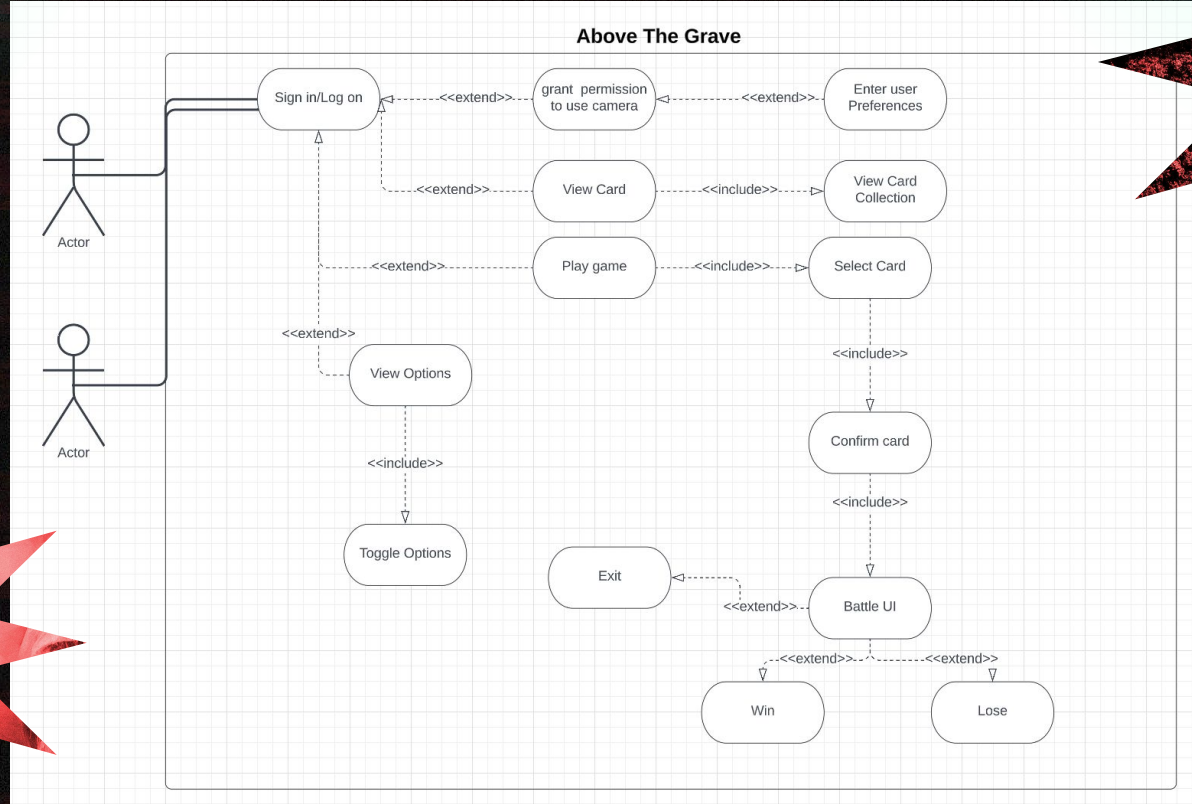
SYSTEM CONSTRAINTS

Tool Constraints

- Mobile App Framework Constraints (Unity, iOS/Android Support).
- Source Code Editor (Visual Studio Code).

Language Constraints

- BackEnd/FrontEnd Language (C#).

Platform Constraints

- Mobile App Platform.

Hardware Constraints

- Mobile Device (certain hardware features required for AR).

SYSTEM CONSTRAINTS

Network Constraints

- Internet Connection.

Deployment Constraints

- Unity Deployment.

Transition & Support Constraints

- AR Maintenance.
- End of Life.

Budget & Schedule Constraints

- Project Timeline.
- Budget Constraint.