### **POCKETPAD**

### SPRINT 1 - PLANNING DOCUMENT

### **PROJECT TEAM 8**

Benjamin Dravis, Jack Fang, Krish Shah, James Burrows, Bautista Tedin, Joshua Irizarry

### SPRINT OVERVIEW

During this sprint, we hope to lay the foundations for the future of this project, so we are not simply focusing on one aspect of our project but are dividing and conquering across several different aspects and functionalities of our project. Pocketpad consists of a client UI a server UI as well as the corresponding connection protocols in order to communicate and access data between the two. Due to this complex connection, we are splitting the work amongst our members, tasking them or having them split our sprint objectives by aspect of the project in order to allow our members to work on what they are interested in, and they will also be working towards a basic implementation of the entire system. By the end of this sprint, our goal is to have a basic implementation of Pocketpad and its intended functionality.

### SPRINT DETAILS

### Weekly Meetings:

- Mondays 11:30am-12:00pm Weekly meeting with TA
- Wednesday 5:00-6:00pm Midweek meeting to discuss progress and roadblocks
- Fridays 4:30-5:00pm (as needed) Meeting to discuss roadblocks if persisting

### Scrum Master:

Benjamin Dravis

### RISKS AND CHALLENGES

The challenge during this sprint will be the interconnectivity of the tasks that we are working on. For this sprint, we are intending to divide and conquer the tasks that we are doing so that we can work on all aspects of Pocketpad with the intention of having a product to continue to work and develop upon at the end of this sprint. However, the different functions will need to interact with each other such as a joystick on the client UI will send a signal through the client to be read by the server which is passed then to both the server UI and emulation services. One action and implementation will have a cascading effect across the application meaning that an action will require subsequent built-in interaction across the entire sequence. As such, our challenge this sprint will be to ensure good communication about methods as to how things are done in order ensure seamless functionality across the entirety of Pocketpad.

### **TOTAL MEMBER HOURS**

- Benjamin Dravis 29 Hours
- Krish Shah 29 hours
- James Burrows 30 hours
- Bautista Tedin 29 hours
- Jack Fang 28 hours
- Joshua Irizarry 30 hours

### **CURRENT SPRINT DETAILS**

### User Story #1, 22 Hours

As a user of the application, I would like a selection option to be able to connect to my chosen device via Bluetooth so that I can play my chosen games with higher connection speed, allowing the controller inputs to run faster than it would with other connections such as network connections.

#	Description	Estimated Time	Owner
1	Implement Bluetooth device scanning and selection with SwiftUI	9 hours	Krish
2	Establish stable and consistent Bluetooth connection between devices	6 hours	James
3	Implement error handling and reconnections for unstable connections	5 hours	James
4	Manual testing of device scanning, Bluetooth connection, error handlings, and reconnections	2 hours	James

- 1. Given that the scanning UI is implemented properly, when the user scans for devices, then the user should be able to view all available devices to connect to, and they should be able to connect with a device from the list.
- 2. Given that the Bluetooth connection is implemented, when the user selects a device to connect with, then the device should maintain a stable connection, and it should remain connected unless manually disconnected.
- 3. Given that there is a Bluetooth connection, when the application detects an issue, then it should automatically attempt to reconnect, and if reconnection fails it should display an error message with troubleshooting options.
- 4. Given that there is a successful Bluetooth connection, when the mobile device attempts to send data to the computer application, then the input data should be transmitted over Bluetooth with minimal latency, and data transfer should follow the created protocol.

### User Story #2, 9 Hours

As a user of the application, I would like to be able to be able to pull up a GUI on the connected device so that I know that I can see the processes and what is happening on the server side of the connection as well.

#	Description	Estimated Time	Owner
1	Design a pyQT user interface	3 hours	Ben
2	Create an app icon	2 hours	Josh
3	Integrate the interface with the server such that any time the server is started on a chosen device	1 hour	Ben
5	Create unit tests to ensure proper functionality	3 hours	Ben

- 1. Given a properly implemented server, when the user loads up the server, the pyQT interface will also load up for use by the user.
- 2. Given a properly developed interface, when the interface loads up, the user should see a GUI that contains the different boxes/sections that will be implemented during other tasks within the project.
- **3.** Given a properly implemented server, when the user closes out of the interface, it also shuts down the server closing all user connections to it.

### User Story #3, 8 hours

As a user of the application, I would like there to be a portion of the GUI that acts as a connection list so that I can see which devices, if any, are connected to the given server at any moment.

#	Description	Estimated Time	Owner
1	Display a graphic (image stored on server) for each type of controller connected to server at a given moment.	3 hours	Ben
2	Query and display other controller metadata such as Bluetooth device name.	2 hours	Ben
3	Create a testing suite to ensure that the interface works properly with any number of controllers and any possible value for other metadata fields.	3 hours	Ben

- 1. Given that the connection list is implemented correctly, when the user connects a controller to the server, then that controller appears within the list in a timely matter (less than a second).
- 2. Given that the connection list is implemented correctly, when a controller is connected, the user should be able to tell which device is the one they connected based on the displayed metadata (device name)
- 3. Given that the connection list is implemented correctly, when the user disconnects their controller, it should swiftly disappear from the menu, and the rest of the menu should rearrange itself to fill the empty space.
- 4. Given that the connection list is implemented correctly, when the user changes their controller type on the client side, the controller icon should update within the connection list to reflect the new controller type.

### User Story #4, 13 hours

As a user of the application, I would like a visual indicator for connection strength displayed alongside the connection list in the QT GUI when using Bluetooth or network mode so that I can troubleshoot input lag or disconnections more easily.

#	Description	Estimated Time	Owner
1	Display a color-changing graphic to give a vague idea of network speed.	4 hours	Ben
2	Include a latency display that provides an exact measure of network latency in milliseconds	2 hours	Ben
3	Display any errors that may arise from the connections	3 hours	Ben
4	Create a testing suite ensuring that the latency display works accurately regardless of number of devices connected and that no possible latency values break the UI.	4 hours	Ben & Bautista

- 1. Given that controller connection is properly implemented, when the user connects their device to the server, then the user should be able to see their device latency
- 2. Given that controller connection is properly implemented, when their device latency changes, those the latency display should reflect this change.
- 3. Given that controller connection is properly implemented, when latency is terrible, then the display should provide a user a clear signal on the display of this without needing them to know what the millisecond value means.
- 4. Given that there is a Bluetooth connection, when the application detects an issue, then display an error message to the user, and provide troubleshooting options.

### User Story #5, 6 hours

As a user of the application, I would like to be able to access a settings menu in the computer GUI so that I can toggle wanted or unwanted features from the GUI display to meet my wants/needs at a given time provided by the application regardless of the type of phone/device that I have.

#	Description	Estimated Time	Owner
1	Put a panel in the settings menu to control detail of controller display on server GUI, detailed or none, implement this functionality in the UI code.	2 hours	Ben
2	Put a panel in the settings menu to control detail of latency display on server GUI, detailed or none, implement this functionality in the UI code.	2 hours	Ben
3	Create a testing suite that ensures all combinations of UI settings do not break any components.	2 hours	Ben

- 1. Given a connected controller, if I change the level of detail, then all controller status GUIs change simultaneously and other UI elements rearrange themselves to fill empty space.
- 2. Given a connected controller, if I change the level of detail, then all latency display GUIs change simultaneously and other UI elements rearrange themselves to fill empty space.
- 3. Given that a user has previously changed the settings, if I open the application, then those settings should persist.

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### User Story #6, 11 hours

As a user of the application, I would like to be able to have an emulated a movement joystick like that of the left stick of common Xbox and PlayStation controllers so that I can control the movement of my characters in the different games that I am playing.

#	Description	Estimated Time	Owner
1	Create a moveable joystick on the mobile device iOS GUI (same implementation as perspective joystick)	4 hours	Josh & Krish
2	Send the joystick input data to the server with the connection protocol (similar implementation as perspective joystick)	2 hours	Krish
3	Receive and read the input data from the client to be used in the server (similar implementation as perspective joystick)	2 hours	Krish
4	Create a testing suite to ensure that the movement joystick functions and sends data through the connection as intended	3 hours	Krish

- 1. Given a properly implemented joystick on the iOS GUI, when the user tries to move the joystick in every direction, then the interface will match the user's actions.
- 2. Given a properly implemented joystick on the iOS GUI, when the user releases the joystick from wherever they are holding it, the joystick should return to the default position.
- 3. Given that the user is interacting with the joystick, when the user moves it in different directions, then the movement should be sent to the server using the predefined protocol, and the data should accurately represent the joystick's direction and position.

### User Story #7, 3 hours

As a user of the application, I would like to be able to have an emulated perspective joystick like that of the right stick of common Xbox and PlayStation controllers so that I can control the perspective of my characters in the different games that I am playing.

#	Description	Estimated Time	Owner
1	Design a joystick button that users of the iOS application can interact with (same implementation as movement joystick)	0.5 hour	Krish
2	Send the proper joystick input through the connection to the server (similar implementation as movement joystick)	0.5 hour	Krish
3	Receive and read the input data from the client to be used in the server (similar implementation as movement joystick)	0.5 hour	Krish
4	Create a testing suite to ensure that the perspective joystick functions and sends data through the connection as intended	1.5 hour	Krish

- 1. Given a properly implemented joystick on the iOS GUI, when the user tries to move the joystick in every direction, then the interface will match the user's actions.
- 2. Given a properly implemented joystick on the iOS GUI, when the user releases the joystick from wherever they are holding it, the joystick should return to the default position.
- 3. Given that the user is interacting with the joystick, when the user moves it in different directions, then the movement should be sent to the server using the predefined protocol, and the data should accurately represent the joystick's direction and position.

### User Story #8, 14 hours

As a user of the application, I would like to be able to have an emulated directional pad so that I can use the directional movement functionality of the D-Pad needed for the menus in some newer games and game functionality in most older games.

#	Description	Estimated Time	Owner
1	Design and create a directional pad feature on iOS application	4 hours	Jack
2	Send the proper directional input through the connection to the server from client-side	3 hours	Jack
3	Receive/read input from the directional input on the server side	3 hours	Jack
4	Create a testing suite to ensure that the directional pad accepts inputs and sends data through the connection as intended	4 hours	Jack

- 1. Given a properly implemented directional pad on the iOS GUI, on a default controller, the user will see the directional pad on the iOS interface.
- 2. Given a properly implemented directional pad on the iOS GUI, when the user holds or releases a directional input, then the client will accept this input.
- 3. Given that the user is interacting with the directional pad, when the user holds and releases different directional inputs, then the inputs should be sent to the server using the predefined protocol.
- 4. Given a properly implemented server, when the user holds and releases different directional inputs, the server should receive the data, which consists of the directional pad's inputs and timings.

User Story #9, 14 Hours

As a user of the application. I would like to be able to emulate the diamond of buttons so that I can interact

As a user of the application, I would like to be able to emulate the diamond of buttons so that I can interact with the different menus and activities such as going through dialog, attacks, option selection, and more that are commonly bound to those buttons and are necessary to play the games.

#	Description	Estimated Time	Owner
1	Design a diamond of four buttons on the iOS application that the user can interact with.	2 hours	Josh
2	Add an option to display the D-Pad as attached buttons.	2 hours	Josh
3	Accept user inputs for directional pad on iOS GUI	2 hours	Jack
4	When the user interacts with a button send the proper button input to the server	2 hours	Jack
5	When the client sends an input to the server, the server properly receives and reads the inputs	2 hours	Jack
6	Create a testing suite to ensure that the iOS application accepts inputs and sends data through the connection as intended	4 hours	Jack

- 1. Given a properly implemented diamond of buttons on the iOS GUI, on a default controller, the user will see the diamond of buttons on the iOS interface.
- 2. Given a properly implemented diamond of buttons, when the user clicks on one of the buttons, the client should send the input corresponding with the pressed button to the server.
- 3. Given a properly implemented server, when the user sends a button input to the server, the server should receive the data, which consists of the diamond buttons' inputs and timings.

User Story #10, 12 hours

As a user of the application, I would like to be able to have emulated bumpers so that I can use the functionality that games I like to play have tied to the left and right bumpers on most common controllers such as blocking or displaying emoticons.

#	Description	Estimated Time	Owner
1	Design and display two bumper buttons/widgets on the iOS application that the user can interact with (similar to the trigger implementation)	4 hours	Krish
2	Send the proper button input through the connection to the server from client-side (similar to the trigger implementation)	2 hours	James
3	Receive/read input from the bumpers on the server side (similar to the trigger implementation)	2 hours	James
4	Create a testing suite to ensure that the directional pad accepts inputs and sends data through the connection as intended	4 hours	Bautista

- 1. Given properly implemented bumper buttons/widgets, when the user loads a configuration that contains bumper buttons, the application UI should display interactable buttons corresponding to the bumpers of a controller.
- 2. Given a properly implemented client, when the user clicks on a bumper button/widget, then the client should send the input corresponding to the pressed button over the defined TCP connection protocols to the server.
- 3. Given a properly implemented server, when the client sends the bumper input over the TCP protocols, the server should be able to receive and read the input from the client for use within the respective server functionality corresponding to that input.

### User Story #11, 12 hours

As a user of the application, I would like to be able to have emulated triggers so that I can use the functionality that games such as shooter or adventure games commonly have bound to those buttons for interaction with certain game mechanics necessary to play certain games

#	Description	Estimated Time	Owner
1	Design and display two trigger buttons/widgets on the iOS application that the user can interact with (similar to the bumper implementation)	4 hours	Krish
2	Send the proper input through the connection to the server from client-side (similar to the bumper implementation)	2 hours	James
3	Receive/read input from the triggers on the server side (similar to the bumper implementation)	2 hours	James
4	Create a testing suite to ensure that the directional pad accepts inputs and sends data through the connection as intended	4 hours	James

- 1. Given properly implemented trigger buttons/widgets, when the user loads a configuration that contains bumper buttons, the application UI should display interactable buttons corresponding to the bumpers of a controller.
- 2. Given a properly implemented client, when the user clicks on a trigger, then the client should send the input corresponding to the pressed trigger over the defined TCP connection protocols to the server.
- 3. Given a properly implemented server, when the client sends the trigger input over the TCP protocols, the server should be able to receive and read the input from the client for use within the respective server functionality corresponding to that input.

### User Story #12, 29 hours

As a user I would like to be able to save controller layouts

#	Description	Estimated Time	Owner
1	Design a struct for controller menu values with enums for each type of button (ie Joystick, D-Pad, regular button, etc).	4 hours	Josh
2	Create an overall controller GUI for displaying where the user would go after connecting to the computer. It will use the struct specified above to determine how to display the buttons. This will also be a conformable GUI that can be reused in the settings menu.	6 hours	Josh
3	Conform the struct to the Codable protocols by adding encoding and decoding functionality. Files should be decodable and encodable to this struct.	4 hours	Jack
4	Include a menu in the client application to choose which kind of controller to emulate, then communicate the chosen type to the server.	3 hours	Josh
5	Design a logo for Pocketpad to be used and displayed for our application	2 hours	Josh
6	Design a small icons for each controller type to be used in graphics on the client and server.	2 hours	Josh
7	Create a hardcoded basic controller using the struct. For this sprint, it will be the functional controller. In future sprints, this will be a default controller that will be modifiable by the user.	3 hours	Josh
8	Create a testing suite to ensure that all valid controllers display and have their inputs handled properly. Also, create a system that will show the user a relevant error if a controller file is malformed	5 hours	James

- 1. Given a controller data file, if the user chooses to use it, then the client GUI should swiftly populate the visuals for the input vectors.
- 2. Given a controller data file, if the user chooses to use it, then the packets sent by the client to the server should reflect the type of controller so that the server is able to use the correct visuals to indicate the connected controller and pass the correct inputs to the Third Party Emulator.
- 3. Given any connected controller, if the server GUI tries to display data about the controller, it should find an icon to represent the controller, or default to the custom controller icon.
- 4. Given a malformed file (invalid positions, nonexistent input vectors etc), if the user tries to load it, packets should not be sent and an error should be shown, as well as an option to delete the file.
- 5. Given a malformed controller in the controller design page, if the user tries to save it, then show them an error and do not save it.
- 6. Given a properly formed controller design, if the user tries to save it, encode it and place it in the application container's documents directory.

### User Story #13, 11.5 hours

As a user of the application, I would like to have a settings menu in the application so that the different options for customization and functionality are easily accessible at any given time as well as not taking up space to ruin the layout and functionality of the emulated controller.

#	Description	Estimated Time	Owner
1	Create a settings icon that when clicked will pull up a menu within the iOS application	3 hours	Bautista
2	Customize the settings menu tying in the different functionalities that will be displayed within the iOS application	3 hours	Bautista
3	When the user clicks off/out of the menu, the settings menu is removed from the display	0.5 hours	Bautista
4	Create a testing suite to ensure that the directional pad accepts inputs and sends data through the connection as intended	5 hours	Bautista

- 1. Given properly developed application, when the user opens the application on their iOS device, an icon/widget should be displayed in a convenient location on the user's screen such that it is not obstructing and interfering with any controller emulation features.
- 2. Given a properly implemented widget, when the user clicks on the settings icon, a settings menu will be displayed on the user's screen so that they can customize and access different features of the application.
- 3. Given a properly implemented settings when, when the user clicks away from the settings menu, the settings menu should automatically be closed/removed from the user's application.
- 4. Given a properly implemented settings menu, when the user interacts with an option within the settings menu, the corresponding functionality should occur within the user's application pulling up menus, options, or changing graphics depending on the option.

### User Story #14, 11.5 Hours

As a user of the application, I would like to be able to be able to make some modification to the types of controls so that I can use my preferred style of controller such as split versus conjoined D-Pad with my chosen controller.

#	Description	Estimated Time	Owner
1	Create a switch as added to the settings menu in order to toggle split versus conjoined D-Pad	2 hours	Bautista
2	Update the controller emulation UI to reflect the user's preference of split versus conjoined D-Pad when the user toggles the switch	4 hours	Bautista & Josh
3	Update the settings menu to include or not include the switch based on whether the current selected controller configuration includes a D-Pad	0.5 hours	Bautista
4	Create a testing suite to ensure that the directional pad accepts inputs and sends data through the connection as intended	5 hours	Bautista

- 1. Given a properly developed application, when the user opens the settings menu, an option should be available to toggle between a split and a conjoined D-Pad if the controllers selected includes the D-Pad option.
- 2. Given a properly implemented settings menu, when the user toggles the split or conjoined D-Pad switch, the controller emulation UI should immediately reflect the user's preferences.
- 3. Given a properly implemented settings menu, when the selcted controller does not have a D-Pad, the toggle switch should be hidden and not available for selection.
- 4. Given a properly implemented testing suite, the directional pad should accept user inputs and correctly transmit data based on the current configuration (split vs conjoined).

### PRODUCT BACKLOG

- As a user of the application, I would like to have a tutorial for the application so that I can have a
  guide for general understanding of how to use the application and its numerous different
  functionalities properly.
- As a user of the application, I would like to be able to have an emulated a movement joystick like that of the left stick of common Xbox and PlayStation controllers so that I can control the movement of my characters in the different games that I am playing.
- As a user of the application, I would like to be able to have an emulated perspective joystick like that
  of the right stick of common Xbox and PlayStation controllers so that I can control the perspective of
  my characters in the different games that I am playing.
- As a user of the application, I would like to be able to have an emulated directional pad so that I can
  use the directional movement functionality of the D-Pad needed for the menus in some newer
  games and game functionality in most older games.
- As a user of the application, I would like to be able to have emulated bumpers so that I can use the
  functionality that games I like to play have tied to the left and right bumpers on most common
  controllers such as blocking or displaying emoticons.
- As a user of the application, I would like to be able to emulate the diamond of buttons so that I can interact with the different menus and activities such as going through dialog, attacks, option selection, and more that are commonly bound to those buttons and are necessary to play the games.
- As a user of the application, I would like to be able to have emulated triggers so that I can use the
  functionality that games such as shooter or adventure games commonly have bound to those
  buttons for interaction with certain game mechanics necessary to play certain games.
- As a user of the application, I would like to be able to emulate a settings button on controllers so that I can access the settings on certain games that I am playing in order customize my in-game settings whilst playing games.
- As a user of the application, I would like my emulated controller to include an option for motion controller so that I can run games such as Mario Kart which can be played with or require using motion control features rather than buttons or joysticks. (i.e. rotating the phone to steer).
- As a user of the application, I would like my emulated controller to have vibrational haptics so that I
  can access and options for the immersive tools that exist in the games that I am playing as well as
  play certain games or minigames such as those in Mario Party that rely on vibrational haptics to
  function properly.
- As a user of the application, I would like my emulated controller to have sound haptics so that I can
  access and options for the immersive tools that exist for setting the environment or style of the game
  that I am playing as well as play certain games or minigames that make use of the sound haptics to
  function properly.
- As a user of the application, I would like to be able to construct custom controllers using a custom and modular layout of buttons, bumpers, joysticks and more so that I can create and experiment with my own unique style of controllers when playing games.
- As a user of the application, I would like to have an accessible controller file within the application to
  emulate an Xbox controller so that I don't have to spend the time creating my own custom version of
  an already pre-existing controller for easy access to it.

- As a user of the application, I would like to have an accessible controller file within the application to emulate a PlayStation controller so that I don't have to spend the time creating my own custom version of an already pre-existing controller for easy access to it.
- As a user of the application, I would like to have an accessible controller file within the application to emulate a GameCube controller so that I don't have to spend the time creating my own custom version of an already pre-existing controller for easy access to it.
- As a user of the application, I would like to have an accessible controller file within the application to emulate a Nintendo switch controller so that I don't have to spend the time creating my own custom version of an already pre-existing controller for easy access to it.
- As a user of the application, I would like to be able to access a library of the commonly used controller files that are on the market as well as the custom controllers that I make myself so that I don't have to manually remake them each time I want to switch between the types of controllers I want to use and simply be able to save and load them as I want.
- As a user of the application, I would like to be able to be able to make some modification to the types
  of controls so that I can use my preferred style of controller such as split versus conjoined D-Pad
  with my chosen controller.
- As a user of the application, I would like to be able to customize the color layout of any given so that I can apply my own style and color preferences to at a given time to the controller that I am using.
- As a user of the application, I would like to be able to customize the name of my controller or device when I connect so that I can clearly identify which controller is connected to me and is accepting my inputs.
- As a user of the application, I would like to have a settings menu in the application so that the different options for customization and functionality are easily accessible at any given time as well as not taking up space to ruin the layout and functionality of the emulated controller.
- As a user of the application, I would like a selection option to be able to connect to my chosen device via network so that I can play my chosen games with more people than I would be able to with connections such as Bluetooth.
- As a user of the application, I would like a selection option to be able to connect to my chosen device via Bluetooth so that I can play my chosen games with higher connection speed, allowing the controller inputs to run faster than it would with other connections such as network connections.
- As a user of the application, I would like to be able to see the eligible devices to connect to in the area in a nice menu so that I can select which specific device that I would like to connect to.
- As a user of the application, I would like to be able to disconnect from what would be then the connected device so that I can stop gaming at any time or potentially switch between different devices if there is another game that I would like to play somewhere else.
- As a user of the application, I would like to be able to be able to pull up a GUI on the connected
  device so that I know that I can see the processes and what is happening on the server side of the
  connection as well.
- As a user of the application, I would like there to be a portion of the GUI that acts as a connection list so that I can see which devices, if any, are connected to the given server at any moment.
- As a user of the application, I would like to be able to see a mock-up of my controller on the GUI so that I can see that it is properly recognizing my controller and the customizations that I potentially put into it beyond the act of simply connecting my phone.
- As a user of the application, I would like the mock-up of the controller to highlight the button, joystick, feature, or whatever input that the user is putting into their emulated controller displayed on

- the GUI so that I can see that my controller is properly sending inputs to the device that it is connected to before playing a game.
- As a user of the application, I would like a clear way to differentiate between different controllers and inputs on the GUI so that if I am using the application to play with a group of my friends, we won't get confused by which person's controller corresponds to which when playing our games.
- As a user of the application, I would like to be able to customize the GUI's color scheme so that I can make the application personal and to my preferences.
- As a user of the application, I would like to be able to access a settings menu in the computer GUI so that I can toggle wanted or unwanted features from the GUI display to meet my wants/needs at a given time provided by the application regardless of the type of phone/device that I have.
- As a user of the application, I would like to be able to import and export controller configurations so that I can share my custom layouts with friends or use their presets.
- As a user of the application, I would like to adjust the sensitivity of my emulated analog inputs so that I can fine-tune the speed and responsiveness of movement based on those preferences.
- As a user of the application, I would like a way to fine-tune dead zones on my emulated analog inputs so that I can eliminate unintended movement or input drift when I am trying to use the controller.
- As a user of the application, I would like the application to ask me to automatically switch between different layouts I manually set depending on what game I am playing so that I won't have to go through the process of switching it each time I am wanting to play a different game especially if I intend on playing multiple games in a single session.
- As a user of the application, I would like the ability to emulate turbo button functionality so that I can automate repeated button presses in certain games.
- As a user of the application, I would like to enable macros for specific button combinations so that I can execute complex in-game actions with a single press.
- As a user of the application, I would like a visual indicator for connection strength displayed alongside the connection list in the QT GUI when using Bluetooth or network mode so that I can troubleshoot input lag or disconnections more easily.
- As a user of the application, I would like a help menu that will provides quick access to more indepth troubleshooting guides and FAQs so that I can quickly resolve any issues or questions I may have when using the application.
- As a user of the application, I would like an option to use my phone as a remote mouse/keyboard hybrid in addition to a controller so that I can navigate game menus or settings that require text input.
- (If time allows) As a user of the application, I would like to have the option to see an overlay over my games so that I can see my inputs on the screen while playing.
- (If time allows) As a user of the application, I would like an option to set up multi-touch gestures to trigger specific in-game actions, allowing for more advanced inputs beyond standard buttons.
- (If time allows) As a user of the application, I would like to be able to sync my controller settings across multiple devices using a cloud backup so that I can access my custom layouts anywhere.
- (If time allows) As a user of the application, I would like the application to be android compatible as well as iOS compatible so that I or users like me would be able to use the services and features.