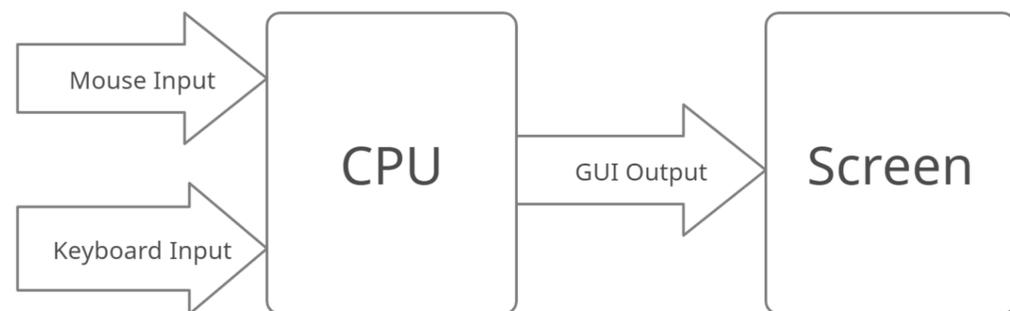


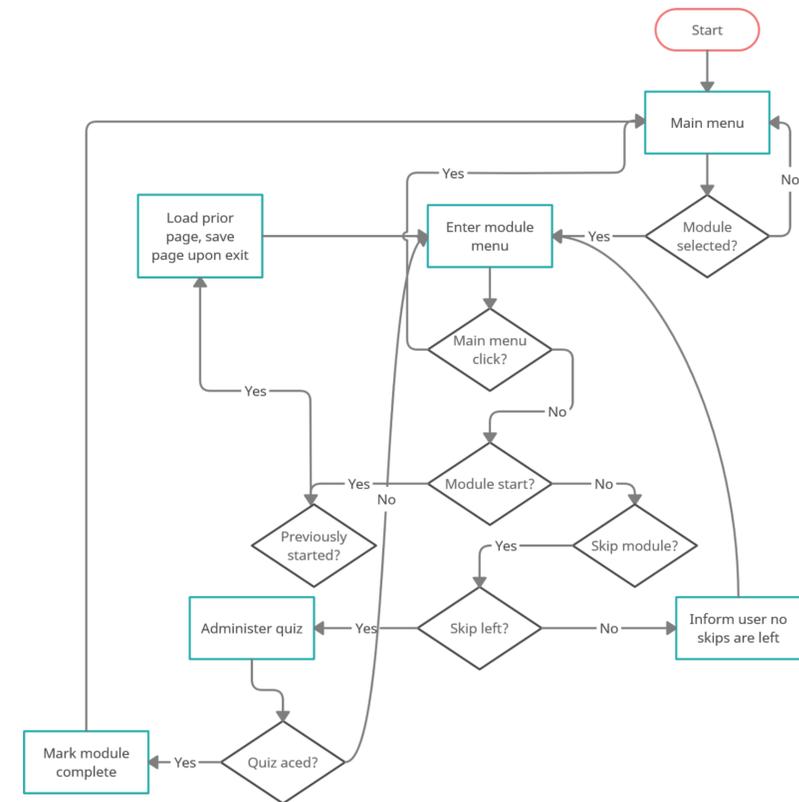
# Code Learning Laptop

## Project

- Learning basic coding skills on your own is difficult. You need to worry about the language, coding programs, and instructional content
- The above barriers to entry keep people from starting to learn coding who would otherwise enjoy it
- This project is designed to consolidate all the resources needed to learn basic coding concepts into one easy to use device



## State Machine Diagram



## Methods

- The whole structure revolves around a layout class that holds all the data needed for one page to display on the screen
- The layouts are individually defined and linked with buttons. When the user clicks a button to transition to another page, the program unrenders the current page and renders the new one
- The content was grouped into five modules, and each module was assigned a state machine. The state machine tracks the module's current status and allows the user to skip and/or restart modules if they choose

## Conclusion

- The final device contains five modules of content to teach users the basics of coding
- Each module includes at least one coding exercise and a quiz to ensure the user learned the material
- The device can run for over 6 hours without needing to be charged making it portable

