For the next team

Congratulations you are the 6th (I think) team to have this capstone project. It has gone through a lot of iterations, but the project seems to be at a point where it is starting to suit the client’s needs (we hope). This document is just going to cover some of the specifics for the project and outline some limitations you might need to consider.

If no big problems have been found, we have recommended that any future teams develop an app/program that allows teachers to create their own stories and then to load it onto the pi. The story is stored completely in JSON format, and any required assets are stored in the assets folder. Basically, the program would have GUI that allows teachers to easily create a new story, and then it uploads it to the PI over a method of your choice. The teachers also really like the idea of saving the stories and being able to retrieve them, so this is something you could also consider for the program

We will list some things we think might help below

* Saving is almost done anyway; the selected options/questions are stored in the readback array. It would just need to be formatted, written to a file, and transferred off.
* We tried to make things as modular in the code as possible, but you may need to make some changes here
* Limit the length of the narrative. All assets are loaded into memory for performance reasons. If the narrative is too long it will run out of ram (ours which contains 30 pages uses about 400MB of ram, Pi only has 1GB)
* Narrative is just a JSON file that contains tags relating to what is to be displayed on each page. E.g. top text, options, sounds to play, outputs to output
* We have also included technical documentation. It outlines the JSON tags that are important for the narrative to operate. We think we included them all but gamemanagers.py has most the code which does stuff based on the tags if you need to see more.
* The game auto boots at launch, maybe you can attach a keyboard and mouse to the PI to close the game. Have not tried this as I always VNCed into it and had the shutdown button modified to close the game. When we got the project it was easiest to just reformat the whole SD card and setup the game/OS again. It is simple just make sure when executing the game from cmd you run it with the python3 command.
* VNC username is pi, password is nightswatch
* Copy of repo is on desktop. Copy of game that is actually running is in /home/pi/Code