



First Prototype Test Report

Speech Interactive Therapy App



Team 13
Speech Therapy

Team Members

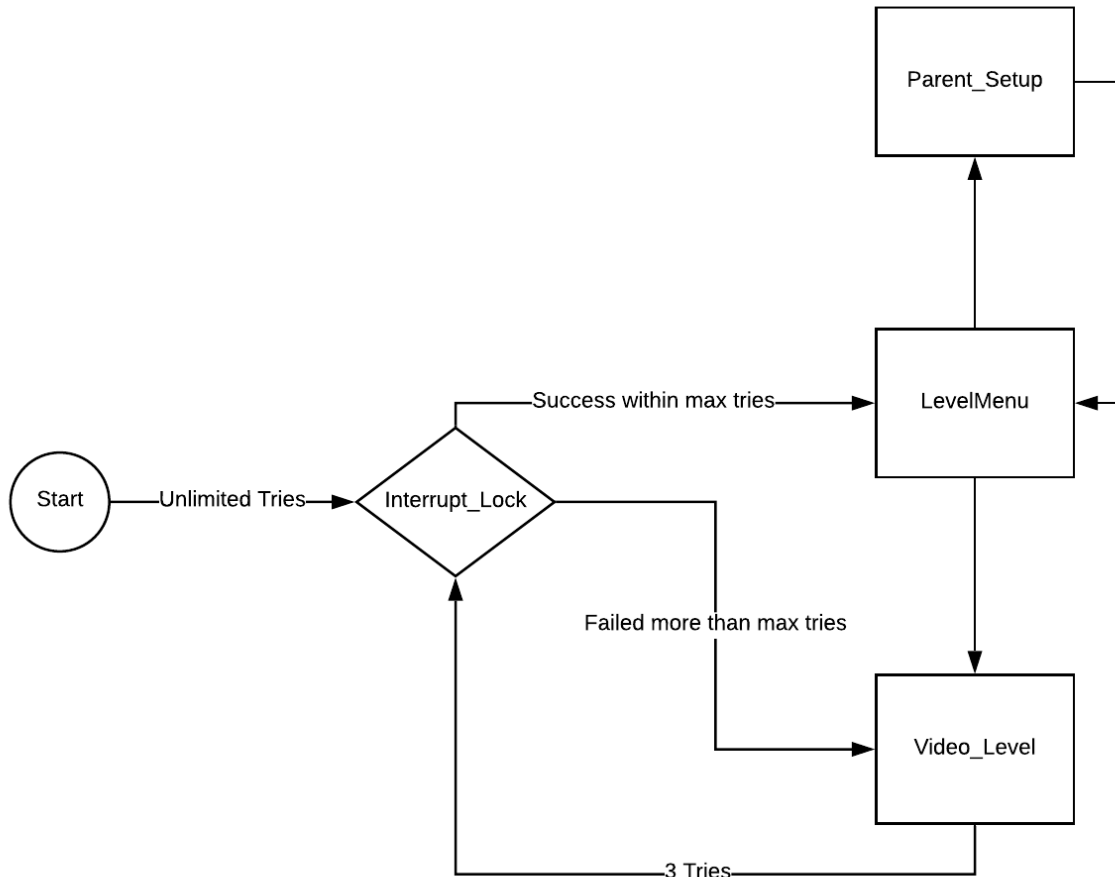
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Equipment/Setup:

- Hardware:

- A Windows Laptop with a Microphone
- Software:
 - Unity 3D Editor
 - FRAPS (to measure framerate in game)

Block Diagram:



Notes:

- Video Level should play rewards after detecting words (changed from previous mode of playing after 3 video loops)
- After failing more than max tries, Video level locks for 60 seconds
- Video Level is the only scene in which the child should ever access

Measurements:

- Frame rate (ran with "FRAPS" on a windows build, framerate capped to approx. 60 due to vertical sync)

- Max - 64
- Min - 52
- Avg - 59.92
- Frame rate goals were met, but some scene changes had stutters
- Load time for scenes

Transition	Times (seconds)	Average Load Time
Start -> Interrupt_Lock	0.1, 0.067, 0.067	0.078
Interrupt_Lock -> LevelMenu	0.033, 0.033, 0.034	0.033
LevelMenu -> Parent_Setup	0.067, 0.034, 0.033	0.044
Parent_Setup -> LevelMenu	0.033, 0.033, 0.034	0.033
Level_Menu -> Video_Level	0.033, 0.034, 0.034	0.034
Video_Level -> Interrupt_Lock	0.033, 0.034, 0.034	0.034
Interupt_Lock -> Video_Level	0.033, 0.033, 0.034	0.033

Conclusion:

In conclusion, we feel that our framework is set up. The scene transitions all work according to our flow chart and there is no need for more scenes. Also, our frame rate targets were met. Nonetheless, there are noticeable stutters. A possible solution is more thread-level optimization and generally refactoring code. This is especially significant so that our build is lightweight for mobile devices. Furthermore, the UI should be more consistent as we get closer to a final build. Lastly, we still have a few more key features to implement including an automatic video player/chooser and a progress tracker. Overall, we feel that we are approximately 33.3% done. The basic app is built, but now we must focus on perfecting the customer experience and revising with our client.