

# *VCare, Virtual Reality Therapy*

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## **Development Plan**

- ❖ Connecting video from VR to WebApp
  - Therapist can see patient in the VR session
- ❖ Integrating Apple Watch and using its biometrics with web app
- ❖ Post-session analysis
  - Generating data and graphs based on the performance of the patient after the session has concluded
- ❖ Gamify VR environment, a specific mode for social anxiety
  - Number of people in environment
  - Volume of people in environment
  - Scripted conversation, intensity of conversation
  - Ambient sounds in the environment
  - All of the above should be adjustable in real time depending on the state of the patient

- All of the above should be represented as a game state
- ❖ Creating a real time feedback loop algorithm to adjust parameters
  - Implementation of various levels of parameters
  - Parameters to change will probably be number of people, level of surrounding sounds, intensity of conversation
  - Parameters are adjustable both automatically through patient info and manually by the therapist looking at the web app
- ❖ Improving UI/Frontend of WebApp
- ❖ Adding a menu screen to the VR app
  - Menu should allow for typing in a room key
  - Menu should be able to have the VR change scenes

### **Sprint 5:**

- Building UI for Web App, displaying the video feed from session, transcription, and other biometrics from the patient
- Implementation of voice tone analysis
- Implementation of automatic level adjustment on server side
- VR environment refinement, menu splash screen

### **Sprint 6:**

- Apple Watch arrival
- Integration of Apple Watch's biometrics to capture more data on the patient during the session allowing for more factors to adjust the parameters of the session
- Implementation of automatic level adjustment on client side

### **Sprint 7:**

- Implementing post session analysis
  - Overall session score
  - Over-time graphs
- Potentially start building scripted conversation

### **Sprint 8:**

- Finish building scripted conversations and integrate into level difficulty
- Add more post session analysis
- Stress-test
- Prepare for presentation
  - Script demo
  - Make slides