# **Fall Term**

## Week 1

Monday, September 25, 2017 6:14 PM

Submitted preferences for project.

### Week 2

Tuesday, October 3, 2017 6:38 PM

Plans: Find out my project and group.

**Problems:** Since the project is a research project, the characteristics of a completed project were hard to define.

**Progress** 

**Summary:** Got project assigned and met my partner. We had a meeting with our client to talk about general project goals and deliverables.

## Week 3

Monday, October 9, 2017 8:27 PM

**Plans:** Start getting to know the Kinect SDK and more confident in devising a solution for the project. Meet with our TA Juneki for the first time. Send problem statement to client to get approval. **Problems:** 

#### **Summary**

Worked on Problem Statement, met with TA.

## Week 4

Tuesday, October 17, 2017 2:33 PM

**Plans:** Meet with Mehmet and Jose, get more information/code from previous work. Learn how data is being put into csv/excel file.

Get approval for problem statement.

**Problems:** 

#### **Summary:**

Met with Mehmet and Louis to talk about short term goals (fall term).

Wednesday, October 25, 2017 2:27 PM

#### Plans:

 $\label{thm:continuous} \mbox{Meet with Heidi from Samaritan to learn about physical therapy techniques to plan our requirements.}$ 

#### **Problems**

#### **Summary**

Met with PTs, worked on Requirements document.

## Week 6

Wednesday, November 1, 2017 2:53 PM

#### Plans:

Meet with client to get approval for Requirements doc. Watch PT DVD to figure out what exercises to use. Do the course for observing patients.

#### **Problems:**

#### **Summary**

Finalized Requirements doc

# Week 7

Friday, November 3, 2017 4:59 PM

#### **Plans**

Decide which PT exercises to implement Observe patients Brainstorm start/stop rules

### **Problems**

#### **Summary**

Observed a Parkinson's patient at Samaritan.

Sunday, November 12, 2017 7:42 PM

#### **Plans**

Have ideas for exercises and start/stop rules ready for Thursday's client meeting. Complete tech review rough draft

### **Progress**

#### **Summary**

Peer reviewed Tech Review.

Met with Mehmet and Jose to tell them about patient observing, possible exercises to implement, and clearing up data collection needs.

## Week 9

Thursday, November 16, 2017 6:50 PM

#### **Plans**

Complete final draft of Tech Review Start design doc

**Progress** 

#### Summary

Submitted Tech Review final draft, might get negative feedback on the "Development Environment" part.

## Week 10

Friday, November 24, 2017 10:36 PM

#### **Plans**

Complete Design doc.

Client meeting.

Hopefully get a Kinect to take home over break?

**Progress** 

### **Summary**

**Completed Design Document** 

# **Winter Term**

## Week 1

Monday, September 25, 2017 6:14 PM

#### **Plans**

Begin working on UI, get familiar with SDK Establish regular meeting time with Mehmet

### **Progress**

**Downloaded SDK** 

### **Summary**

Downloaded SDK, have yet to begin development Didn't get Kinect

## Week 2

Tuesday, January 16, 2018 2:30 PM

#### **Plans**

Meet with Client
Meet with TA
Get Kinect hardware from McGrath
Make a simple UI
Progress
Got Kinect sensor

#### Summary

Got a kinect sensor. Looked at sample programs from the SDK.

## Week 3

Friday, January 19, 2018 2:00 PM

#### **Plans**

Make a simple UI Implement body tracking

### **Progress**

Looked at Kinect samples and chose which ones to use in our project

### **Summary**

Planned out how we'll implement the first goal of our project

Sunday, January 28, 2018 6:27 PM

#### **Plans**

Demo initial basic UI and body tracking to Mehmet Get joint tracking to work

#### **Progress**

Completed first basic UI

#### **Summary**

Implemented body tracking and simple UI.

Met with Dr. Nemhard, Mehmet, and other members of the kinect project

### Week 5

Monday, February 5, 2018 3:33 PM

#### **Plans**

Work on Poster and Progress Report Have an Alpha ready by Week 6

### **Progress**

Got application closer to alpha demo Started integrating gesture recognition

#### Summary

Worked on Poster and Progress Report
Adjusted UI for alpha demo
Encountered problems with body tracking display being misaligned
Changing display window size caused problems
Started adding gesture recognition, breaks application

## Week 6

Sunday, February 11, 2018 4:58 PM

#### **Plans**

Submit Poster and Progress Report Fix body tracking display issues Get gestures to work

#### **Progress**

No progress made on actual project Focused on getting progress report done

#### Summary

Finished progress report

Monday, February 19, 2018 6:49 AM

#### **Plans**

Get gestures to work

I will use Kinect, Louis will use Vitruvius

#### **Progress**

#### **Summary**

Didn't make progress on the project due to last minute things, schedule conflicts

## Week 8

Monday, February 26, 2018 5:28 PM

#### **Plans**

Use Vitruvius to implement gestures

### **Progress**

Build errors averted by moving our code to DiscreteGestures sample project Learned that we can do gesture recognition with less complicated methods

#### **Summary**

Gave up on Kinect VGB
Implemented the ArmRaise gesture with Vitruvius

## Week 9

Tuesday, March 6, 2018 10:45 AM

#### Plans

Finalize UI for beta
Fix UI navigation issues
Implement two gestures
Have a counter for gestures
Export data to csv

#### **Progress**

Changed UI to have individual exercise pages accessible from the Exercises page Got code to export to csv

#### Summary

Added more user feedback in the UI

Monday, March 12, 2018 12:41 PM

#### **Plans**

Make our project feature complete
Add report generation page with csv collection
Add Data Collection Settings option
Have each exercise page detect its exercise

### **Progress**

### **Summary**

Finished progress report doc and slides Added reports page Added data collection settings page Csv export for each exercise

# **Spring Term**

## Week 1

Monday, September 25, 2017 6:14 PM

#### **Plans**

Work on fixing page loading/lag issues Work on report generation Set up meeting time with client Register for Expo

#### **Progress**

### **Summary**

Registered for expo and sent model release forms

## Week 2

Friday, April 13, 2018 2:24 PM

#### Plans

Meet with Mehmet, clarify what we will have complete Work on bugs

#### **Progress**

Fixed UI issues by using Pages and Navigation Service Added data visualization to report generation

#### Summary

Met with Mehmet to talk about expectations for final product, got feedback Addressed some bugs in beta

Re-created UI using pages instead of user control Used navigation service to navigate between pages (has its own garbage collection) Added report visualizations

Met with Kirsten to talk about client evaluation

## Week 3

Wednesday, April 18, 2018 2:39 PM

#### **Plans**

Complete new UI version with added fixes Work on poster

#### **Progress**

Poster done

#### Summary

Finished poster, sent to Junki and Kirsten for feedback

Sunday, April 22, 2018 6:46 PM

#### **Plans**

Add changes to poster from feedback Submit poster Add updates/fixes to new UI **Progress** 

### **Summary**

Finalized poster, submitted to canvas Polished UI Now developing everything on KinectPT project

## Week 5

Sunday, April 29, 2018 2:14 PM

#### **Plans**

Write Progress Report and presentation Finish Report Generation and Data Collection

#### **Progress**

Report generation – reads from csv file of one exercise and displays it

### **Summary**

Worked on report generation, data collection UI, and started progress report

# Week 6

Sunday, May 6, 2018 2:34 PM

### Plans

Finish data collection settings and reports page before code freeze (Friday)

#### **Progress**

Finished data collection feature

#### **Summary**

Completed data collection and reports

Monday, May 14, 2018 6:23 PM

### **Plans**

Polish reports page and node clipping for expo

### **Progress**

Got feedback from expo attendees

### **Summary**

Polished project for expo Expo happened

# Week 8

Thursday, May 24, 2018 12:26 PM

#### **Plans**

Rep input
Node clipping
Documentation
Final report and presentation **Progress** 

### Summary

Implemented rep input

## Week 9

Tuesday, May 29, 2018 11:28 AM

### Plans

Node clipping
Documentation
Final report and presentation
Remove unnecessary folders on github **Progress** 

#### **Summary**

Cleaned and commented code Removed unnecessary folders on github Formatted final paper Outlined final presentation

Thursday, May 31, 2018 5:29 PM

#### **Plans**

Clean and comment code and test by WEDNESDAY
Debug reports page
Return Kinect on THURSDAY
"hand off" project to Mehmet via email WEDNESDAY
Finish presentation by FRIDAY

### **Progress**

Final testing of product. Fixed remaining bugs.

### **Summary**

Tidied up and commented code

Tested application and fixed remaining bugs. Mainly issues with data settings affecting csv export
Returned Kinect Hardware
Handed off project to client via email
Completed final presentation