# Week 1

## Accomplishment - current week

1. Went through the Leap motion SDK(java) to get basic understanding.

2. Implemented few sample program.

3. Started to implement the features of 2d Mouse using the controllers..

         - Right Click and scroll function - working perfectly

         - Mouse movement and point - has lot of delay in the movement and needs restructuring of the code.

          - Left Click implementation is in progress

4. Went through the paper "An HMM-Based Threshold Model Approach  
for Gesture Recognition"

## Next week Work

1. Complete the Literature survey and understand current trends in gesture recognition and the mathematical models used.

2. Compare the working of Leap motion with those papers and other available devices Like kinect and myo Band.

3. Modify the current working of the program to include smooth mouse movement and Left click.

# Week2

1. Went through few papers on gesture recognition and tutorials, YouTube videos on HMM

Gesture Recognition: A Survey

Static hand gesture recognition using neural networks

Hidden Conditional Random Fields for Gesture Recognition

Hand gesture recognition using a real-time tracking method and hidden Markov models

Latent-Dynamic Discriminative Models for Continuous Gesture Recognition

Hand gesture recognition with leap motion and kinect devices

Parametric hidden Markov models for gesture recognition

1. Modified previous week program on leap motion to work with frames.
2. Implemented left click for the 3D mouse.
3. Almost done with drag and drop implementation.

## Next week Work

1. Write a summary of the literature review – to be used in final report and read few more papers for advanced gestures.
2. Start working on the mathematical models to be used.
3. Comment the code already written and figure out a way to implement the program so that it runs in all machine architecture or operating system.
4. Complete the implementations necessary for week4 milestone for review.

# Week 3

1. Completed the milestone1 implementation. Will be done with core rearrangement by tonight or tomorrow afternoon.
2. Summarized and presented the project description in the colloquium.
3. Started with the preprocessing necessary for next Milestone.
4. Started to read one more thesis on Leap motion recognition (<http://www.cs.put.poznan.pl/wjaskowski/pub/theses/LeapGesture_BScThesis.pdf>).
5. Looked into the RealSense 3D camera by Intel and pre ordered it.

## Next Week Work

1. Submit milestone1 for review.
2. Discussion on scope of next milestone.
3. Read a few more literatures as some of it are really interesting.
4. Upload all work done so far into Github.