Data Communications

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Introduction

Goal - Provide an API to be used with mobile devices and Microsoft Kinect to transmit data to a cloud based database running MySQL

Motivation

- Need to transmit data from device to cloud
- Security
- Reliable

Related work

- MySQL connectors
- HTTPS security

Approach

Provide the following

- Authentication
- Insert data into the database
- Guaranteed arrival

Evaluation

- Connection reliability
- Failover for bad connections

Timeline

Date	Development Timeline	
	Goal(s)	*Responsibility*
Week 1	***Project Management*** Determine methods of communications. Setup GitHub Repository	***All***
Week 2	***API Design*** Determine the different function calls for the API and their requirements	***All***
Week 3	***User Authentication*** Create methods to authenticate against the cloud database	***Morris***
Week 4	***Buffer design*** Develop the buffer to handle the queuing of actions and implement	***Saari***
Week 5	***Insert function*** Implement method to add data to database through buffer	***Saari***
Week 6	***Read function*** Implement method to read data from the database	***Morris***
Week 7	***Validity testing*** Evaluate the API for data reliability requirements	***All***
Week 8	***User testing*** Have the team evaluate the API for usage	***All***
Week 9	***Feedback*** Based on feed back from user testing adjust API and add functionality	***All***
Week 10	***Completion*** Polish API. Address any additional requirements for release	***All***