Authentication

|  |  |  |
| --- | --- | --- |
| Client |  | Server |
| Send | username: STRING  Password: SHA-256 of password |  |
|  | State: success/failure  Token: salt value | Expected |

Server is expected to query the database and checks if username and password is valid  
SHA-256 Hash is implemented using the JavaScript of the following site:   
<http://www.movable-type.co.uk/scripts/sha256.html>

Retrieve Upcoming Class

|  |  |  |
| --- | --- | --- |
| Client |  | Server |
| Send | username: STRING |  |
|  | Class Details:  Class: classID  Class: CSXXXX Venue: MBLT Geolocation\_X: 1.0123  Geolocation\_Y: 1.2334  Lecturer: Dave Cohen  Hash: hash of above data with SHA256 with salt | Expected |

Server is expected to query the database and checks the class within the 10 min before and 15 min after the class time.

Attendance Sign-in

|  |  |  |
| --- | --- | --- |
| Client |  | Server |
| Send | username: STRING  Class: classID  Authentication Code: code  Geo\_X: 1.0123  Geo\_Y: 1.2334  Hash: SHA256 of above data with salt |  |
|  | State: success/failure/late  Hash: SHA256 of above data with salt | Expected |

Server is expected to query the database and checks the class within the 10 min before and 15 min after the class time, checks the authentication code, and match student’s geo x and geo y and then registers user attendance and return result

Teacher

Start quiz

|  |  |
| --- | --- |
| Teacher |  |
| Send | Start:Boolean  Token:unique authenticate value after log in  Course Id: String |
|  |  |
| Expect to Reveive from server | State: fail/success  Result: NULL/live data for options(decimal) |

Server check DB make sure correct course is selected to start quiz then send message to indicate state and student answers (percentage for example) to mobile end.

Mobil end should notice student when success, that they have an open quiz to answer.

End quiz.

|  |  |
| --- | --- |
| Teacher |  |
| Send | Stop: Boolean  Token: unique authenticate value after log in  Course Id: String |
|  |  |
| Expect to Reveive from server | State: fail/success  Result: data for options(decimal) |

Server check if there is an open quiz then close it. Give final stats of answers.

Student

|  |  |
| --- | --- |
| Student |  |
| Send | Answer: Single Char  Token: unique id after login  CourseID:String; |
|  |  |
| Expect to Reveive from server | State: success/fail/quiz closed |

Mobil end send answer and authenticate information to server, server need to send back message indicate success or fail.