**Formal Meeting 4 on 6th November 2018, 15:15-15:45**

Participants: Paul Dempster (supervisor/client)

Team 15 : Denis Stepanov, Melanie Cheong, Mingda Liu, Tianhao Li, Yiming Chen, Masrur Sobirov

Absentees: None

1. Introduction and recap of the progress

* The website maintenance: the background has been changed, the agenda and minutes files can be browsed and downloaded directly from the webpage.
* Talk about the problems we encountered during Android Studio (AS) installation.
* The report outlines.

2. Problem and discussion about the Android Studio

* We met with problems about the SDK, Proxy, VPN and different versions of AS, but most of them have been solved. Almost all team members can run it successfully.
* Supervisor suggested that the use of a concrete Android phone may be better than the simulator in AS. Some difficulties may occur when using the simulator: the sensor and camera are not easy to use.
* Lab computers may have AS installed which could be helpful if available.
* We may borrow some android devices from the IT/Library if possible.

3. Interim report

* The background research on bouldering is required in the interim report.

4. Research methods

* Some research methods: survey (static), face-to-face (interview) and focus group meeting (dynamic), to find what we need and can add in our software.
* Preferable to consider the use of Qualtrics.
* We should consider the ethics aspect.
* It is important to decide which method to use before getting the ethics approval.
* Between the two questions: What do you think of this idea? Or What do you want? The former is better.
* Type of response: by selection, text box or free form writing.
* The different research methods have their own pros and cons: survey is static, not much information can be gathered. Focus groups is dynamic, but time consuming and should be careful about the content consistency.
* We can add scenario or comments to help interviewees to better understand our questions.
* Evaluation of the research is important.

5. Ethics

* No matter what kind of research method chosen, if there is the involvement of human participants, animals and datasets relating to people, we should get the ethics approval
* The related Ethics lecture slides from the supervisor will be sent to us to read.
* Book for reference: Research Methods in Human-Computer Interaction, Joathan Lazar and Jinjuan Heidi Feng and Harry Hochheiesr, 2010, Wiley

6. Other

* The rope for the big (high) wall in the UNNC gym is to guarantee the safety. It does not make much difference for climbing (but maybe help). But now, we should only consider the small walls.
* The rope is not the only differentiation between bouldering walls. it’s the type, position, frequency of holds for a different style of climbing.

7. Tasks

* To read the ethics materials, and finish the ethics form for next meeting.
* To decide on the research methods and survey questions.
* Continue to design prototypes on AS.

8. Next meeting time

* Monday 12th at 14:00-14:30 in office.