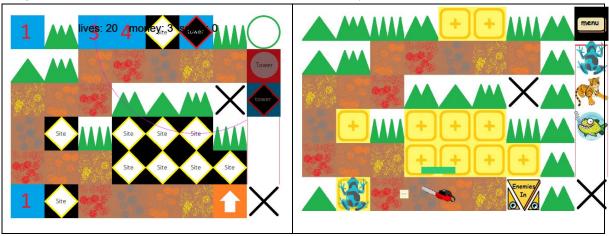
Q6

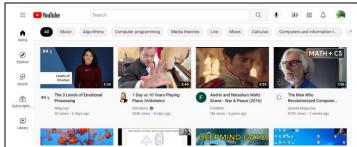
i.

(1) By giving users more time, they can **get more familiar with the low-fidelity model which will be improved later but has the full functionalities**. For example,



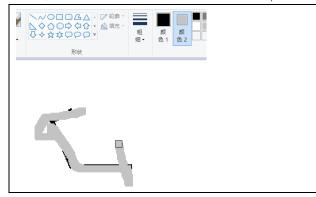
The above pictures are low-fidelity and high-fidelity prototypes of my Agile project. There are not much real differences in functionality, it's just the difference of layout. By giving users more time, they can figure out how to start our game, and give us feedbacks on the functionalities.

(2) We should observe users' behaviours – what they find out first, then where they hesitate on, etc. when giving users some time, and do some notes. It is because sometimes asking users about where they stuck is less effective than just observing them directly. For example,



I have designed the Youtube website. Now I give users some time to get familiar with Youtube. First, I observe that user A is browsing through the page to look for 'my account', and soon he finds it out at the top right corner - so this place is effective.

(3) In testing, to mimic a real-world senario, users should be given some space to use the system and to explore all the features individually. Otherwise if we only follow the testing pipeline of asking and filling in the form, users would not have a chance to experience the real-world usage senario. For example,



In Microsoft Paint, by giving users some time, they can discover the eraser can have different colours just by selecting 'Colour 2'.

#### ii. Advantages:

- (1) Quantitative data is paired with experiment design and some evaluations that make the results can be replicable.
- (2) Quantitative data can be continuous, which means that it can get wide range of data. It can discover some intermediate states that are not observable by qualitative data.

#### Disadvantages:

- (1) Quantitative data cannot explain questions raised by sociology or other humanities, because it has ignored the opinions from individuals, their backgrounds, their emotions, etc. Quantitative data assumes all the samples are taken in a 'fair' way.
- (2) Quantitative data often ignores outliers. However, sometime outliers are the key. E.g. a research that cares about stay-at-home children should just focus on outliers of the age when entering into school.

iii.

# Advantages:

- (1) The data-collection methods can be varified and flexible. It can be collected through many times, whenever the users are available.
- (2) The complexity of data (outliers etc.) can be included into the conclusion of our research. In fact, quanlitative data is just for researchers to discover about the complexities of their research interest.

### Disadvantages:

- (1) Qualitative data is less persuasive in statistical view, and thus it lacks of logical support from mathematical theories. The interpretation is too flexible that there may exist biases.
- (2) Qualitative data requires researchers must be equipped with special knowledge in that field. Otherwise, they would not have the ability to interpret any data.

(475 words)

(6 Questions in Total: 2856 words)

## References:

- https://greengarageblog.org/15-advantages-and-disadvantages-of-quantitative-research
- https://vittana.org/23-advantages-and-disadvantages-of-qualitative-research