# 7. How

## 7.1 Resources & Tools

1. Xcode

a. Short description

Xcode is an integrated development environment (IDE) provided by Apple to developers for the development of MacOS, iOS, WatchOS and tvOS applications.

b. Rationale

Because our group will develop a program on the ios platform. Xcode has a unified user interface design, coding, and testing that is the fastest way to develop OS X and iOS applications. Support multi-language programming programs C, C++, Objective-C or Java programming and it can publish the program directly to the App Store. Therefore, the Xcode is the most suitable IDE for our program.

c.Specific version

Xcode 9.4.1 For free.

d. Alternative plan

Eclipse

<https://www.eclipse.org/>

2. proto.io

a. Short description

Proto.io is a dedicated mobile phone prototyping platform that can build and deploy prototypes of fully interactive mobile applications and simulate similar finished products.

b. Rationale

It's convenient for quickly creating an interface because it has a rich set of standard UI elements, and many of them are customizable. In addition, it can be many screens in a project, and transitions can be made between these screens.

c. Specific version

Proto.io 6 Free for 15 days.

d. Alternative plan

invision

<https://www.invisionapp.com/>

## 7.2 Collaborative Workspaces

1.google doc <https://drive.google.com/drive/u/0/folders/1CsO1w9nZACLbIzIfCf-IPmvI-VHngsY->

Google doc is the tool our team uses to write reports. Controlled by our tutor and given the permission of our team members to edit.

2.github

<https://github.com/s3665803/excited-bird>

Github is controlled by our team member Bowen Yang and gives us team members permission to edit.

3.trello

<https://trello.com/b/HchjnuLb/tr-excited-birds>

Trello is controlled by our tutor and given the permission of our team members to edit, which can show the progress of our assignment.

## 7.3 Communication Expectations

Wechat

In order to be able to respond in time and propose ideas after class, we create a wechat group, which it can help our group eliminate misunderstandings and improve efficiency.

Basically, six members of our team use WeChat every day to discuss assignments and to check and correct the completed parts.

We divide the assignment into six equal parts for each member. The connection between each part is powerful despite the fact that each member has there individual parts. Therefore, in order to guarantee the quality of the assignment, we need to report on the task. We report three sections in the WeChat group every day, which is completed tasks, remaining tasks, and scheduled tasks.

Every member of our team is essential and contributes to the overall efficiency of the team. The absence of team members, whether planned or not, will affect the efficiency of the team. First of all, if the absence is foreseen in advance, then the leader will assign the task to everyone, and the absent member will complete it at other times and use WeChat to report the completion to other members. Besides, if there is an unexpected absence and the impact is greater, the leader will assign the absentee task to other members who have the ability to complete.

## 7.4 Decision-making Processes

We use brainstorming methods to make decisions. First, all team members are free to comment. In addition, we will post the idea to give other members a reference, which will allow everyone to be inspired and combine ideas with other people's opinions. In addition, our team members are treated on an equal footing. Finally, it is not allowed to evaluate the quality of an idea during the idea collection phase, and not to refute the opinions of others.

Once the team has different opinions and needs to be resolved, we will first put aside the dispute on the disagreement, refine and execute the same point, and then automatically select the direction of the divergence point through more and more new data and new results.