

Heilmeier Catechism for ECE Capstone Design
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I am using this website as a reference for "Heilmeier Catechism".

<https://www.acs.org/content/dam/acsorg/events/professional-development/Slides/2013-08-08-heilmeier.pdf>

1. What are you trying to do?

I am trying to develop a mobile application running on Android platform. This Application tells people what to eat based on their preference.

2. How is it done today, what are the limits of current practice?

Currently, there are many applications that can tell people the info of restaurants such as food style, location, price level, and even see the comments from other visitors. However, even though these information are pretty solid for people to choose a restaurant, people sometimes still do not know what to eat. There are lots of reasons behind this, people may get too familiar with the nearby restaurants and they do not know what they really want in the end. Or people are quite new to one place and they cannot decide what to eat among plenty of restaurants nearby and no patience and time for looking up those information. Even if they read them, they cannot decide.

3. What is new in your approach and why do you think it will be successful?

I am developing this application that can tell people what to eat instead of giving people information of restaurants. When people look up the information of restaurants, they make active choices. That means based what they see, they make decisions for their own. However, the idea for this application is putting people in a passive place. It does not need people to make decisions, instead it gives people decisions, tell people what to do. It will be successful because there are lots of people have problems deciding what to eat every day. If they can use this application, they can either know what they really want or they can go to whatever application gives. So this problem will be solved and there are lots of time can be saved.

4. Who cares?

Based on my personal experience, college students need this, especially they want to hang out with friend during the weekend. Also, people who are just new to a place and they want to try the local restaurants but do not know which one to choose.

5. What difference will it make?

Whenever people want to go to a restaurant, they just need to open the application, filter their preference, and go. They do not need to think about which one to choose or spend time looking up for restaurants information. For those people who are not sure what to eat, by using this application, they will have an idea based on the results and that will help them make the decisions.

6. What are the risks and payoffs?

I think as long as I successfully implemented those functionalities, there are not much risks for this project since it does not involve any hardware investment and the only thing come to my mind right now is the cost of cloud data service for storing users information.

7. How much will it cost?

I think in general, the cost of money will less than 200 dollars. The cost of time will be 2 to 3 months. I think a group of 4 can handle this application implementation.

8. How long will it take?

It will takes about 2 to 3 months.

9. What are the midterms and final exams of this project?

I think a really important functionality for this application is getting user's location and apply user's preference. One important preferences is getting the restaurants information based on user's choice of distance. For example, if user would like to eat a Korean BBQ restaurants with medium price level, positive feedback and within 10 miles, the first thing need to do is get the 10 miles work. Hence, implementing this functionality is the midterm for the project and later on, giving the answer of BBQ restaurant is the final exam.

Summary:

There are lots of ideas about this come to my mind right now but the general idea is there. Since application can give user a result, it can show an address and let user to explore themselves so that they might have a little surprise with the restaurant. Even though I emphasize a lot the filter but it would be fun to not use the filter and let application randomly gives to a restaurant to explore. This will be really fun when people travel to a new place, the place they never been before.