

SDWII Project Explanations

Originally written by Bill Zhong with thanks to Dr. Judy Feng

Message you should read before you come to your teaching assistant.

We released the requirement for the project on Software Development Workshop II. If you read it carefully, you can find the following concepts you may not familiar with,

- Customers
- Software Requirement Specifications (SRS)
- Software Design Specifications (SDS)

What we hope you can do in this project is to find a real customer, bring their real demand on information technology, then implement a system that

- meets the requirements of your customer and
- meets our project requirements about website, UI, and the database.

Finding Customers

You should look for a real customer first. If you indeed have a problem finding one, you can switch to a virtual customer, which is your teaching assistant.

What your customers need to do is,

- Provide their needs on the system
- Give their expectations on the system (on UI, speed, etc.)
- Provide some sample data

Your customers will NOT do,

- Provide the software design to you
- Provide the 50000 rows of data for you to fulfil the requirements

If you decided to make your teaching assistant your customer, we will do exactly the same thing.

Pro tips, you should measure your scale of the project accordingly, ensure you can finish all the job listed below before the presentation.

Customer Requirements

The most important part here is the customer (not us, the teaching team). All that you will do is based on the requirements of your customer. If you get a real customer, you should take your responsibility.

Your customers will always know less about computer science than you do. You need to communicate with them, analyze their needs, and transform them into your software design. SRS and SDS are prepared for this.

A typical communication process will happen like this,

1. You ask your customer for their needs and make notes.
2. According to your notes, you make the SRS by identifying the information from the notes.
3. You come to your customers again with your prototypes, and take notes on the suggestions from your customers.
4. Repeat step 2 and 3 until your customer satisfy your design (in UI, logic, etc.).
5. According to your final version of SRS, make your SDS.
6. According to your SDS, start the implementation.
7. Test your work, make sure it works fine.
8. Submit your work to your customers.

You can see, communicate with customers will be extremely difficult. So you have to keep your patience and do this well because the requirements of your customer will be your standards and goals of your project.

The SRS

The software requirements specifications (SRS) is a document which allows you to organize the requirements from your customers, they will be your reference for implementation.

Read the explanations on the template before you move on.

The template we gave to you already have much explanation on each section. Please read and try to understand the explanation written on the template, if you have difficulties on it, please contact us.

But please make sure you have fully understood!

The information you get from the customers should be enough to fill your SRS.

How can you get the information from your customers? Since your customer will always know a little on computer science, you should NOT ask questions with terms.

For example, if you want to ask them on the "Communication Interface" section on SRS,

- [DON'T DO] Will you want your system to be connected through HTTP?
- [SHOULD DO] Do you want your system to be accessed by your mobile phone / WeChat public account?

Once you can get enough information from the customers, you can start writing your SRS. But please delete any text not related, and change the titles in section 3 to your actual feature names.

The SDS

The SDS contains multiple diagrams that you need to draw. Read the explanations on the template before you move on, and delete any text not related when you filling your content in the SDS.

Your design of the software should be done by yourselves and you can always come to us for suggestions. Bear in mind, DO NOT discuss your detailed design (class diagrams, E-R diagrams, etc.) with your customers.

How to find a virtual customer

If you decided to communicate with your teaching assistant for the customer requirements, we will behave as a real customer would do.

Always come in groups. Especially when you are discussing the requirements with us.

Send us an email with your group number and purpose of appointment.

You can contact Helen (Section 1001) through helenjqwu@uic.edu.hk or Richard (Section 1002) through yuchaogao@uic.edu.hk.

Hopefully, this document can help and thanks for your cooperation.