



Elephant Carpaccio - Break down a project into user stories and tasks

- Main objective of the lab is for the students to understand on how to break down a project into smaller deliverable user stories, and then break them down into smaller task.
- The lab will also include some simple coding exercise. You are free to use any programming language or compiler that you are comfortable with. The coding implementation is for the calculating algorithm for the BMI (Body Mass Index).
- Because of time limit, you do not need to build the whole application for the BMI calculator. If you would like to continue this lab on your own time, you can fully implement the application, create unit test, implement the GUI (ex. Using Visual Studio) and have it as a desktop application in your computer. You could also integrate the application into a website.

Project

Your new start-up company is given a project by an international hospital that wants to add a new feature in their website. The feature is to enable the patients to calculate their own BMI (body mass index) and to display the historical BMI data of the patient directly from the website. Depending on the BMI result of the patient, the feature should be able to give some suggestions on what the patient should do in order to achieve the ideal BMI. The patients of this hospitals are from around the world, including the USA.

You will have the follow-up meeting with the customer, presenting the timeline and deliverables for different iteration. To be able to do this, you and your team needs to break the projects into user stories and smaller tasks.

Hint: USA does not use metric system.

Instructions

What needs to be done:

- **List the requirements**

First you need to list all the requirements from the customer, in order to get clearer pictures what the customer wants. You can also create a Definition of Done (DoD), i.e. list of things that should be done in order to be able to close the project.

- **Break the project into smaller user story.**

Break down the user stories in a vertical way, instead of horizontal way. Although both give you smaller items, but vertical break down of user story will give you a working and demonstrable software.

- **From the user story, break it down further more into smaller tasks.**

After you get list of user stories, break it into even smaller tasks. A good size of task is something that would require at least a day and maximum a week for one person.

- **Write codes on the calculating BMI part.**

Create algorithm that is able to take the input parameter (weight, height, etc.). If you don't know how to calculate BMI, there are plenty of BMI calculator that you can pick from the internet.

Once you write the code for the algorithm, run the code and see if it display the correct output.

- **Think about adds-on feature**

Besides the requirements given by the hospital, you can always add more feature to the application in order to increase the user experience. And of course when you can sell more feature, it means increase the cash flow to your company. What kind of feature that you want to add? How would you break the feature into user stories? How would you break the user stories into tasks?

- **Create a full-functionality for the application**

On your own time, you can continue to implement this application by creating unit tests, do the implementations of login systems, non-metric system, GUI, displaying suggestions, and showing statistics for historical data of the user. This application can be saved as a desktop application on your computer, or integrate it into a website, or transfer it to your mobile phone.