

# PLAN FOR PROJECT IMPLEMENTATION

Course

Software Engineering

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# "TYPING YOUR WORDS" APPLICATION



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#### 1 OVERVIEW

The application is developed in ASP.NET platform, using Visual Studio 2013 tools from Microsoft. We are interested in designing the application with ASP.NET MVC 5 framework.

At the beginning, the first demo will be a local web application. Later on, after the testing process going well, it will be given to the customers by being published on a web server, which supports ASP.NET.

The first version of the application will provide only English words. All users can use the application to test their typing speed; with the given time is 60 seconds. The given words are randomly chosen from the database, which stores thousands of vocabularies.

Otherwise, the login users will have another privilege. They are allowed to input their own words, no matter what the language those words are. Therefore, they can basically choose either the default words from the system or their own words for the typing test.

To be more interesting, the application will divide the words into few levels, for example:

- Level 1: the most 200 common words
- Level 2: the most 400 common words
- Level 3: the most 1000 common words

Last but not least, there is a statistic table given to customers, so that they can check their last 10 performances as well as see the record of others.

So far, after several versions and user's feedbacks, the product is believed to be more interesting and more useful for the customers.

#### 2 PLAN FOR PROJECT IMPLEMENTATION

In order to complete the project smartly and on time, the plan of the project is created by the team discussion. After the idea and documentation is created. There are 5 next steps that we have to do:

- i. System Analysis (Requirements Analysis)
- ii. Design
- iii. Implementation
- iv. Testing
- v. Evolution

#### 2.1 Requirements Analysis

In the first stage, it is not quite related to the technical issue. However, software is not only about coding something but also satisfying the requirement of the clients. Therefore, this stage is one of the most important step to help the software success in the future.

There are few tasks that we have to do in this stage:

- Prepare some sort of interviews or surveys to gain the users' expectation and satisfaction about the application.
- Creating the prototype.
- Creating the Use Cases.
- Requirements specification:
  - o Customer Requirements
  - o Architecture Requirements
  - o Functional Requirements
  - o Non-functional Requirements
  - o Design Requirements
  - o Etc.
- Requirement issues:
  - Stakeholder issues
  - Developer issues
  - Attempted solution

#### 2.2 Design

Different from the first step, but based on the above analysis, the second step is about designing the application. Design is not only about the user interface but also about the software architecture design and database design. The stage is divided into 3 main parts:

- i. User Interface
- ii. MVC design (Models design)
- iii. Database design

#### 2.3 Implementation

This stage is believed as the most technical and the most time consuming stage. After the design is complete, it is the time for the developers to do their real favourite job. User Interface, client-side, and server-side have to combine and interact together.

### 2.4 Testing

After the implementation is done, the team have to test the project before releasing to the customers. Some test applications can be used. However, it is always necessary to get reviews from customers. Therefore, the technical review product can be given to some of random users to test the application.

#### 2.5 Evolution

Last but not least, after the initialization, the software is undoubtedly need to be maintained and upgraded to newer versions. Some new features can be added, or some bugs have to be fixed.