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| **Software Requirements Specification** |
| Requirements for Version 1.0 |
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| **T2A Team** |
| **20/10/2012** |
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# Revision History

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| **Creator** | **Date** | **Reason for changes** | **Version** |
| AnhMV | 1/10/2012 | Create draft | 1.0 |
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# Introduction

## Purpose

Duy Tan University (DTU) is located in the heart of Danang, the biggest city in central Vietnam, with many great advantages in terms of climate, location, transportation, and social infrastructure. Danang is also the main gateway to some UNESCO World Cultural Heritages Sites, including the Phong Nha - Ke Bang National Park, the Hue Citadel, Hoi An Ancient Town, the My Son Holy Land, and other natural sights such as Non Nuoc Beach, the Marble Mountain, the Cham Museum and the Ba Na Resort, all of which certainly makes Duy Tan University an ideal place for study and enjoyment.

Established in 1994, Duy Tan University is the first and the largest private university in Central Vietnam. Over the past 17 years, Duy Tan has invested in constructing spacious facilities with five campuses of about 50,000 square meters, ten laboratories and nine workshops, with more than 1,100 internet computers. Duy Tan has become a university with some of the highest quality facilities in Central Vietnam.

Duy Tan University offers seventeen courses to 43,000 students at undergraduates, college and postgraduate levels, which have graduated more than 25,000 qualified students into the labor force. Over 89% graduates got jobs after their graduation. This rate is even higher (100%) for DTU Information Technology students.

DTU’s goal is to become a multidisciplinary and diversified university by the year 2020. DTU lecturers and staff are highly encouraged by the Board of Rectors to do scientific research, which is considered as a basis for quality assurance in educating and adapting to social requirements.

With the above goals. To enhance learning as well as teaching at the University for all students. Duy Tan University had planned to construct a system to pratice programming and algorithmic thinking through the exercises. With the hope that by participating in this software you will find excitement in learning computer science, improve their qualifications, and also can exchange and learning from you!.

## Document Conventions

In general this document prioritizes in writing the schema of the client-server mechanism that takes hold in this project and then analyzing in detail the tools that are available in the iTest editor and question database system. Therefore there are lots of abstractions to represent in a more convenient way the objects and their behavior on the system. Every requirement statement is assumed to have its own priority as to define in most appropriate way the system behavior .In addition there are various figures that represent the described system, where it is needed, and serveonly for better understanding of the deployment. Please refer to the official documentation of the program at <https://code.google.com/p/dt-online-judge/> if you have specific questions based on your system.

## Scope

To produce the software that met all the objects, we have many goals as following:

* Build the website that allow user to user anywhere if they have internet connection
* Website must clearly display the exam.Have attached the file upload function in accordance with standards prescribed by the competition.
* Uploading image is the important function to this website.
* Apply the high level and free technical to produce website
* To release this product in short time, we must use simpler development process. We'll use warterfall process in this project.

## References

This citation is used as a model of reference [**IEEE Std 830-1998]**

# Overall Description

## Perspective

Since this is a open source program it is under the GPL so the source code is free to download. There are various reasons why should anyone use this program.

## Features

The major features this program contains are the following:

Scoring: Students after completed answer a question can know score they have earned.

Scores filter: Show score listing (Top to Low)

Cross platform support: Offers operating support for most of the known and commercial browser.

Language support: Offers multiple language support for global use.

Printting: Offers printting support. User can be printed exam to offline view.

Class diagram

## Users classes and Characterisstics

### Physical Actors

Student

Teacher

### System Actors

Client

Server

## System Enviroments

This program will operate in the following operating and browser enviroment for the client and the server.

* Mac OS X ( Safari 10.6.8 )
* Microsoft Windows ( Internet Exolorer 9.0, Google Chrome 22, Firefox 15)
* Linux ( Firefox 15)

## Design and Implementation

This program is created using C# programming language and uses the MVC 3 library for the main and client modules. So a minimum PC having at least 256MB of RAM and CPU over 1GHz is required to run the program with good speed. Also the program uses 20MB of hard disk space to store the program libraries.

A guide is providing to how to step by step install program on server.

For language support except from the basic English language pack there is also a Vietnamese language pack can be enabled within the program.

## User documention

Here are the official links of the project where you can retrieve more information about it and download the latest version:

Online documentation:

<http://dt-online-judge.googlecode.com/svn/trunk/Delivers/>

Official Webpages

<http://dt-online-judge.googlecode.com>

<https://code.google.com/p/dt-online-judge/>

## Assumptions and dependencies

# System Features

# External Interface Requirements

## User Interface

## Hardware Interface

# Other Nonfunctional Requirements

## Performance Requirements

## Safety Requirements

## Security Requirements

## Software Quality Attributes

# Appendix A: Glossary

# Appendix B: Analysis Models

# Appendix C: Issues List – Change log