Software Requirements Specification

For

Computer Science Department Website

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**Revision History**

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1. **Introduction**

***1.1 Purpose***

The purpose of this Software Requirements Specification is to provide high-level and detailed descriptions of the Computer Science (CS) Department Website. This Software Requirement Specifications (SRS) will provide quantifiable requirements of the website for use by the designer and the users of the CS Department Website.

***1.2 Intended Audience***

This is a website for CS Department of International Ataturk-Alatoo University, therefore it’s mainly designed for university students, prospective students, graduate students, international students, alumni and staff.

***1.3 Product Scope***

This site is designed to provide valuable information to all visitors from school-leavers, who are decide which department to choose, to alumni graduates and teachers. The site is designed so that anyone can find the information they needs.

***1.4 Acronyms, Abbreviations, Definitions***

*CS - Computer Science*

*SRS - Software Requirement Specifications*

*HTML - Hypertext Markup Language:*

It is the predominant markup language for web pages. It is the basic building-blocks of the web pages. A markup language is a set of markup tags, and HTML uses markup tags to describe web pages. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, etc., as well as for links, quotes and other items. The W3C (World Wide Web Consortium), maintainer of both HTML and CSS standards, encourages the use of CSS over explicit presentational markup.

*CSS - Cascading Style Sheet:*

A style sheet, known as CSS, language used to describe the presentation semantics of document written in a markup language. One of its most common applications is to style web pages written in HTML and XHTML, but the language can be applied to any kind ig XML document, including SVG (Scalable Vector Graphics) and XUL (XML User Interface Language). CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, color and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristic, enable multiple pages to share formatting and reduce complexity and repetition in the structural content. The CSS specifications are maintained by the World Wide Web Consortium.

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*JS - JavaScript*

An object-oriented scripting language used to enable programmatic access to objects within both the client application and other applications. it is primarily used in the form of client-side JS, implemented as an integrated components of the web browser, allowing the development of enhanced user interfaces and dynamic web sites. JS is a dialect of the ECMAScript standard and is the characterized as dynamic, weakly typed, prototype based language with first-class functions. JS was influenced by many languages and wa designed to look like Java, but to be easier for the non-programmers to work with.

***1.5 References***

HTML - <https://en.wikipedia.org/wiki/HTML>

CSS - <https://en.wikipedia.org/wiki/Cascading_Style_Sheets>

JavaScript - <https://en.wikipedia.org/wiki/JavaScript>

jQuery - <https://en.wikipedia.org/wiki/JQuery>

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1. **Overall Description**

***2.1 Product Perspective***

The new site, updated version, designed considering all the positive and negative qualities of the current site.Since this system will be a web-based application/site, a proper Internet browser such as Firefox, Internet Explorer, etc. will be needed for viewing and interacting with its contents.

***2.1.1 User Interfaces***

The web site will include user interface which will have a full responsiveness for all browsers and devices. Each page of the web site will include a header and footer page to help keep the look and feel consistent throughout the web site. The header will include the client’s logo and navigation bar. The footer will contain copyright information and a sitemap.

***2.1.2 Software Interface***

Ruby on Rails:

Specification Number: 5.0.0.1

Source:[http://rubyonrails.org/](http://rubyonrails.ofg/)

Rails is a web-application framework that includes everything needed to create database-backed web applications according to the Model-View-Controller (MVL) pattern.

***2.1.3 Communications Interfaces***

Mozilla Firefox:

Specification Number: 49.0.2

Source:[http://www.mozilla.com/firefox](http://www.moxilla.com/firefox)

Mozilla Firefox is a free and open source web browser that will interpret the XHTML markup the PHP parser produces and apply the necessary styles as defined in the various CSS pages to create the overall look and feel of the web site.

Internet Explorer:

Specification Number: 11.0

Source:<http://www.microsoft.com>

Internet Explorer is a web browser that will interpret the XHTML markup the PHP parser produces and apply the necessary styles as defined in the various CSS pages to create the overall look and feel of the web site.

***2.2 Product Functions***

The visitors must be able to utilize the web site in the most efficient way positive with given design and in regards with standardized web flow.The users need to be guided with easy to

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use web pages that are presented in a way that can accommodate even the novice user but all the while have the features that experienced users can take advantage. Each page will be nearly arranged and displayed in an easy to understand design.

***2.3 Operating Environment***

Any device (PC, laptop, tablet, smartphone), any platform (Linux, Windows), any Browser (Mozilla, Chrome, IE, Safari)

***2.4 Design and Implementation Constraints***

*CMS:*

Using web site ready pattern and CMS is not allowed. Only hand-made front-end

*Design:*

The complete overall design will be the focus after all agreements with client. There will be a design concept but the full design will implemented as time permits.

*Completions:*

The CS Department web site must be complete by the end of December 2016

***2.5 Assumptions and Dependencies***

*User Competency:*

The user must have a basic knowledge of how to operate a computer and browse the Internet.

*Communication:*

The web browser the CS Department web site is accessed from any browser.

*Internet:*

The end user must have Internet access. High-speed Internet access is preferred but not required.

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**3. Specific Requirements**

***3.1 Functional Requirements***

*Responsiveness:*

Responsiveness is an approach to web design aimed at allowing desktop web pages to be viewed in response to the size of the device one is viewing with. A site designed with Responsiveness adapts the layout to the viewing environment by using fluid, proportion-based grids.

*Site Map:*

A site map is a list of pages of a web site accessible to users. It can be either a document in any form used as a planning tool for Web design, or a Web page that lists the pages on a website, typically organized in hierarchical fashion. Sitemaps make relationship between pages and other content components. It shows shape of information space in overview. Sitemaps can demonstrate organization, navigation and labeling system.

*Google Analytics:*

Administrator of web site must know: 1) who visit the site, 2) how many visitors, 3) what they do, when they are in your web site, 4) when they visit your web site, 5) where did they arrive on your web site from, 6) how they interact with your site’s content.

***3.2 Quality Requirements***

*Reliability:*

The web-server should always be available no matter what time a user attempts to access the web site. Maintenance of 1 hour per six months is the maximum downtime the system should receive.

*Maintainability:*

Administrators will have the ability to edit the contents of the CS Department web site.