Technical Document Evaluation Req. spec

Course: CMPS 4113: Software Engineering

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Draft

Final Grade: _____

Format: Scale 1-10 8

- [x] Title page
- [x] Revision History
- [x] Table of Contents
- [x] Font/ Spacing/ Margins consistent
- [x] Use of Headers
- [x] Section names and numbers proper
- [x] Every section has text
- [ ] Captions and descriptions for figures and tables N/A.
- [ ] Necessary citations/references
- [x] Page numbering

work on complete references

Format Scale 1-10 _____

- [ ] Title page
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Content Scale 1-10 7

- [x] Introduction
  - Motivation/purpose/Scope
  - [x] Overview of document
- [x] All relevant material/complete
- [x] Organization
- [x] Creative
- [x] Correct spelling/grammar

scenarios 1.7.5 Table

use case Diagram goes in section 2.3.1

Content Scale 1-10 _____

- [ ] Introduction
  - Motivation/purpose/Scope
  - Overview of document
- [ ] All relevant material/complete
- [ ] Organization
- [ ] Creative
- [ ] Correct spelling/grammar

Very good. →

Fix / give to customer

Fix again

Turn in w/ this sheet, original and new copy.

Uploading Picture ID's for Wells Fargo Cards

Requirements Specification

This document outlines the Application Scope and Requirements for the Uploading Picture ID's for Wells Fargo Cards

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Don't have headers and footers on 1st Page.

Revision History

Author	Revision Number	Date
Johann Redhead, Tellon Smith	1.0	02/09/2017

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1. Introduction

1.1 Purpose

The customer is in charge of creating and maintaining an application to be used to upload images for Wells Fargo Campus Cards. This involves using photos taken of students with Wells Fargo accounts to be uploaded using the web application. The Wells Fargo Campus Cards can be used as both debit cards and MWSU ID cards.

The current system for management of the ID's is a web-application called Card Services. It uses PHP to interface with a MySQL database that contains all Wells Fargo/MWSU ID card users and other sensitive information pertaining to the student. The current system allows the user to search the database for a given card, delete a card, create a card, browse all cards and generate a file for a card.

The current system is old, slow and prone to crashes due to its previous design and large amounts of data. The customer desires a system that will provide a better GUI and efficiency. While the current system allows the user to complete the required tasks, the customer envisions a system that accomplishes the same tasks while being efficient and user-friendly. The customer also requires that certain parts of the system remain intact, while changes are made to the surrounding front-end and back-end components.

1.2 Scope

1.2.1 Main Objective

The scope of the problem may seem overwhelming initially for a team of Software Engineering students without any prior knowledge or experience. The main objective however, is to design and implement a system that the customer would be comfortable presenting to the primary users of the system at the Midwestern State University Information Desk. The new system will provide a user-friendly, graphical user interface that combines with the back-end to interact with the underlying database and should demonstrate enough features to persuade the customer to present the system to the primary users for implementation. The development process will occur over a one semester period. During the semester, all specifications and requirements will be met to the best of the team's ability.

1.2.2 Specific Goals

The customer desires a system that is graphical in nature and more efficient. Navigation menus, icons, drop-down menus and use of a mouse. A visual approach with menu tabs representing the different operations and ranged data output is envisioned for the system. With each menu tab options, icons relevant to the operations will be visible. Photo-cropping capabilities for uploaded images will also be updated and refined to improve visual representation and user interaction.

1.3 Overview of Document

The remainder of the document is intended to inform the customer of the intended designed system. The proposed user interface, constraints, major and minor functions, functional and non-functional requirements, hardware and software requirements and major users are also described in the upcoming parts of the document.

2. System Development and Target Environment

2.1 Target Environment

The system development environment is described as follows:
The **Hardware** will include a personal computer with the following specifications:

- 500 GB hard drive with at least 2 GB of free memory
- 16 GB RAM or at minimum 2 GB of RAM
- 2 Gigabyte video card of RAM
- CD-RW drive
- LCD screen display 14" or greater

The minimum requirement for the target environment would be any personal computer that is capable of running a modern version of the following web browsers:

- Google Chrome version 56.0.2924.76
- Safari version 10.02
- Mozilla Firefox 51.0

The **Software** utilized in the project will include:

- Windows 10
- Microsoft Visual Studio Code
- Notepad ++
- MySQL
- XAMPP
- GitHub
- Google Docs

2.2 The Users

The users of the developed system are the employees and administrators at the MWSU Information Desk and the customer. These users will interact with the system to complete all functional requirements. These users are the primary actors in all use cases for the system. The primary actors are those who interact with the system on a daily basis and the customer. The daily users include the SA's at the information desk and the full-time

employees of the CSC Information Desk.

The usefulness of the system respective to the CSC Information Desk staff is as follows:

- User-friendly interface that allows for easy creation, deletion and searching of cards.
- Easy cropping of the student's picture to fit the criteria defined for the cards.

2.3 System Requirements

2.3.1 Functional Requirements

The functional requirements are statements of information processing capabilities that the system must contain. The functional requirements for this system include the following:

- User must be able to create/generate/modify a card.
- User must be able to crop student's picture.
- User must be able to delete cards.
- User must be able to browse and search cards.
- User must be able to generate file to send to Wells Fargo.

These functions represent the main functions that the system was created to complete. The functional requirements would be the components of the menu bar of the web page.

2.3.2 Non-functional Requirements

The non-functional requirements elaborate a performance characteristic of a system. The non-functional requirements of the system include the following:

- System must only be accessed by users having proper credentials
- System must provide a user-friendly interface that conforms to commonly used web-applications user interface look-and-feel and man-machine interaction conventions.
- The software database must be easily searchable/navigable
- The software must protect against improper input
- System must keep track of user sessions and log users out after session expiration.

These functions represent the underlying functionality the system will provide to ensure security, interface requirements, safety requirements, quality and performance.

2.4 Issues

While the goal is to meet as many of the requirements as possible, these requirements can only be met within a possible test environment. The development team recognizes that testing on every web browser and browser version is no longer possible as browser updates and deployment are done on an aggressive weekly or bi-weekly basis and are subject to change even during the creation of the system. With this in mind, complete testing of the system across all browser platforms is not feasible and would prove to be very inefficient. Therefore, compatibility issues may exist when the system is first rolled out.

Please find out what the user ~~does~~ prefers! And just worry.

2.4.1 Constraints

Constraints are restrictions on the solution space of a software system. The current constraints placed on the system are software constraints and code constraints placed by the customer. These constraints are:

- Source code created by the customer must be reused in the system.
- The system is limited to the web browsers Google Chrome, ~~Safari~~ and Mozilla Firefox

3 ?!

2, by request of the Customer

3. Risks

Table 1 shows

The risks involved in the development of the project ~~and~~ mostly revolve around communication and time management and project domain. The project requires not only communication among team members but also requires communication with the customer. There is a possibility for loss of information between meetings and misinterpretation of information. With regards to time management, the development team may find it hard to schedule physical meeting times or to set up frequent contact as the different schedules are unable to jive. Another issue facing the development team is that of problem domain. With a lack of problem experience, the developers may find it challenging to attack the issue with the most efficient solution or lack of exposure to the problem may cause misinterpretation of information. Course loads, illness?

So how will you handle this.

table 1

Risk	probability	impact	Mitigation
	Hi Low	Low Hi	

4. Glossary

- MWSU – Midwestern State University
- CSC – Clark Student Center
- SA's – Student Assistants
- Web Browser – an application used to access and view websites
- GB – Gigabyte
- RAM – Random Access Memory: Random access memory (RAM) is a type of data storage used in computers that is generally located on the motherboard. This type of memory is volatile and all information that was stored in RAM is lost when the

- WFCCS - Wells Fargo Credit Card System

computer is turned off.

- Front-end – part of the web that you can see and interact with. The frontend usually consists of two parts: the web design and front end web development
- Back-end - The backend usually consists of three parts: a server, an application, and a database.

5. References

- TeamTreehouse "I Don't Speak Your Language: Frontend vs. Backend" by Josh Long September 25, 2012, http://blog.teamtreehouse.com/1-dont-speak-your-language-frontend-vs-backend
- Techpidia "Random Access Memory" https://www.techopedia.com/definition/24491/random-access-memory-ram
- Techterms, "Web Browser" https://techterms.com/definition/web_browser
- Dr. Terry, Griffin
- Kung, David, Object-oriented Software Engineering: An Agile Unified Methodology. New York, NY: McGraw-Hill, a Business Unit of the McGraw-Hill Companies, 2013. Print.

edit card

6. Use Case Diagram

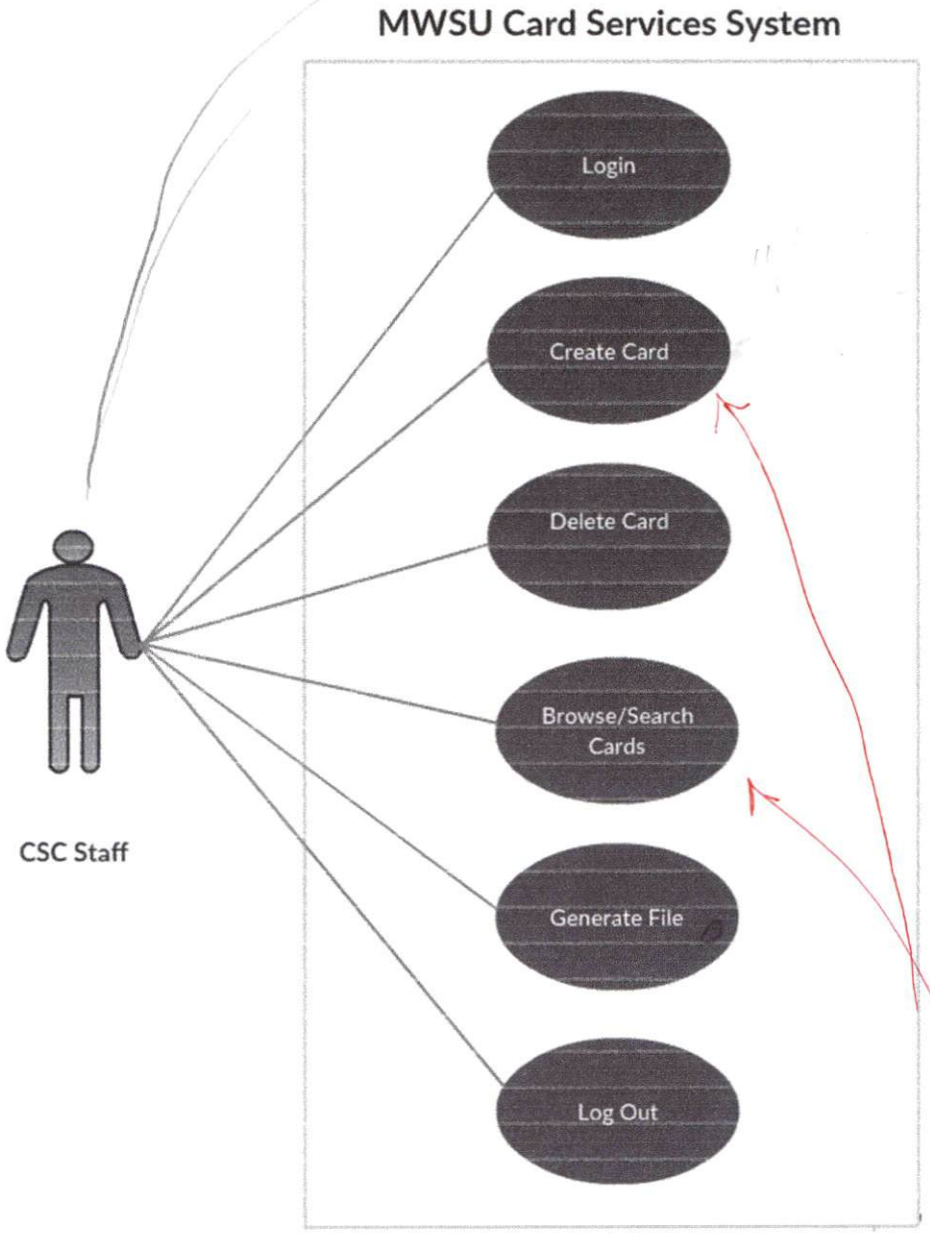

Figure 1

would have like 2 scenarios discussed in detail.