Lab 2- MCE Product Specification Outline

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1 Introduction

This document states a summary for the system: Monarch Course Explorer. The Introduction section includes Purpose, Scope, Definitions, Acronyms, Abbreviations, References, and the Overview of the system. The second section is titled Overall Description. The Overall Description includes the Project Perspective, Production Functions, User Characteristics, Constraints, Assumptions and Dependencies.

1.1 Purpose

The purpose of this document is to state a summary clearly and comprehensively for the system: Monarch Course Explorer. The document will state the functional and non-functional requirements for the system. The sections in the document will provide a brief overview of the project's major objectives and components.

1.2 Scope

The primary goal of this system is to increase and improve the accessibility of course materials, student feedback, and syllabi to faculty and staff. This system strives to compile professors' curricula into a consolidated centralized platform location. Monarch Course Explorer will serve as an important and custom learning tool. This tool will enhance the educational experience for faculty and students.

1.3 Definitions, Acronyms, and Abbreviations

- **Beautiful Soup:** A Python library for parsing structured data.
- **Django:** A free and open-source, Python-based web framework that follows the model–template–views architectural pattern.
- **HTML:** Hypertext Markup Language, standard markup language for documents designed to be displayed in a web browser.
- **MIDAS:** Monarch Identification and Authorization System, Old Dominion University's log-in and password management system.
- **NLP:** A subfield of computer science and artificial intelligence (AI) that focuses on the interaction between computers and humans in natural language.
- **PostgreSQL:** A free and open-source relational database management system emphasizing extensibility and SQL compliance.
- **RWP:** Real World Product that will be developed and used.
- **spaCy:** An open-source software library for advanced natural language processing, written in the programming languages Python and Cython.
- **SSO:** Single Sign On. A method for providing a single login across multiple related services.

1.4 References

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1.5 Overview

The remaining sections of this Software Requirements Specification document will provide the overall description of Monarch Course Explorer system. The overall description includes Product Perspective, Product Functions, and User Characteristics. The remainder of the sections will provide an overview of the projects key components, objectives, software configurations, external interfaces, and capabilities of the system.

2 Overall Description

Monarch Course Explorer is moderated platform where faculty and students can view and add feedback to the course website. This product will serve as a supplement for advising services at Old Dominion University. This website will filter and compare syllabi to better assist students and advisors in course choice evaluation.

2.1 Project Perspective

Monarch Course Explorer is intended to function inside of Old Dominion University's boundaries and interface. Numerous interfaces and systems will be interacting with Monarch Course Explorer to ensure versatile functionality. It will supplement and enhance the current procedure for academic advising, registration, and course curriculum process.

2.2 Product Functions

The functionality of the Monarch Course Explorer system is diverse. It is designed to cover numerous important functions. This system addresses the specific requirements of the faculty, advisors, and students. The functionality covered by Monarch Course Explorer includes:

- System Generated Course Recommendations: The system creates customized course recommendations based on user quiz choice selections. This will ensure students and advisors still has a chance at customizability even if uncertain on course selection.
- Course Syllabi Access and Comparison: Students, faculty, and advisors can view uploaded and verified syllabi . These documents will include course descriptions, grading policies, instructor information, class times, and hosting locations. Advisors and students are able to have a side-by-side comparison of the syllabi to ensure the best course selection is made.
- User Authentication: A two factor authentication process is used by synchronizing Monarch Course Explorer with Monarch Identification and Authorization System (MIDAS). Users must access Monarch Course Explorer with their verified Old Dominion University granted email address and password. The Monarch Identification and Authorization System (MIDAS) ensures privacy and integrity while accessing this platform.
- Instructors and Student Feedback: This moderated platform allows users to give their constructive feedback on instructors and course sections. Instructors are free to rate, reply, view, filter, the students feedback.

2.3 User Characteristics

User must have sufficient web browsing and web navigational skills to use this system. Curriculum committee members, advisors, students, and instructors at Old Dominion University are the considered users of Monarch Course Explorer. The user also must be a verified and current staff or student at Old Dominion University with valid service credentials for use.

2.4 Constraints

N/A

2.5 Assumptions and Dependencies

N/A