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IS 636: Structured System Analysis and Design

**Deliverable 1: System Request**

Group Name: Digital Catalysts

**Team Members:**

Kumbam, Sai Sri Harsha

Martha, Harshith

Nagabhyrava, Jaswanth Ram

Submission Date: 7th March 2024

**Project Title:** Enhanced Course Enrollment and Notification System

**Project Sponsor:**

* Dr. Sidas (Sy) Saulynas from the Department of Information Systems at UMBC, with a profound background in Human-Centered Computing and Assistive Technology research, generously sponsors our project. His expertise guides our Blackboard user experience enhancements, ensuring alignment with UMBC's academic objectives.
* Email: [saulyn1@umbc.edu](mailto:saulyn1@umbc.edu)

**Business Need:**

To enable cross-departmental course registration and automate waitlist management, an integrated system has to be built due to the inefficiencies and lack of transparency in the current course enrollment process.

**Business Requirements:**

* Automated Waitlist Management:
  + The system should automatically manage course waitlists.
  + As enrolled students drop or disenroll, the system must efficiently move students from the waitlist to available seats.
* External Course Registration for Cross-Departmental Students:
  + A streamlined process for students to express interest in courses from other departments.
  + Integration of a consent form and obtaining permissions for enrollment.
* Transparent Communication through Notifications:
  + Implementation of a robust notification system (email, mobile) to promptly inform students about changes in their enrollment status.
* User Customization of Notification Preferences:
  + Allow students to customize their notification preferences, ensuring they receive alerts through their preferred communication channels.
* Dashboard Integration for Enrollment Tracking:
  + Provide students with access to a centralized dashboard where they can monitor their enrollment status, see where they are on the waitlist, and get details on requests for cross-departmental courses.
* Feedback Mechanism for Continuous Improvement:
  + Devise a mechanism that enables instructors and students to comment on the course enrolling process.
  + Regular evaluations and modifications in response to user feedback to guarantee ongoing progress.

**Business Values:**

* **Improved Efficiency:**
  + The system aims to streamline the course enrollment process, reducing manual efforts and waitlist-related challenges.
* **Increased Satisfaction:**
  + Enhancing transparency, providing timely notifications, and offering customization options contribute to higher satisfaction levels among students.
* **Enhanced Academic Planning:**
  + The system supports better academic planning for students from diverse departments by facilitating cross-departmental course registrations.

**Special Issues or Constraints:**

* **Privacy and Data Protection Compliance:**
  + The system must adhere to relevant privacy and data protection regulations to ensure the secure handling of user information.
* **User Training for New Features:**
  + Recognize the need for user training to familiarize students with the new features and functionalities introduced by the enhanced system.
* **Scalability for Future Growth:**
  + Design the system with scalability in mind to accommodate potential future growth in user numbers and system complexity, ensuring sustained performance over time.
* **Responsive Design for Multiple Devices:**
  + Design the system with a responsive interface to ensure optimal user experience across various devices, including desktops, tablets, and smartphones.

**Project Plan**

**Group Name: Digital Catalysts**

**Objectives:**

The project aims to improve user communication through a single dashboard, automate queue management, and ease cross-departmental registration through the use of an integrated system that tackles inefficiencies in course enrollment. Ensuring compliance with privacy regulations,and offering comprehensive user training are all top priorities. The objective is to increase the overall efficacy, transparency, and user satisfaction of the course enrolling process.

| **Task** | **Task Description** | **Expected Completion** | **Task Leader** | **Key Deliverables** |
| --- | --- | --- | --- | --- |
| **1** | Project Scope and System Request Documentation | 03/07/2024 | Project Manager | System Request Documentation |
| **2** | Elicitation and Documentation of User Requirements | 03/28/2024 | Quality & Operational Supervisor | Requirement listing, stakeholders interviews |
| **3** | Diagrammatic Representation of Proposed Solution | 04/18/2024 | Process Analyst | Diagrams, System Models & Representation |
| **4** | Feasibility Analysis, Risk Assessment, and Alternative Solutions Analysis | 05/02/2024 | Project Manager & Quality Operational Supervisor | Testing Reports, Identified and Resolved Issues. |
| **5** | Preliminary Design of Proposed Solution | 05/14/2024 | Process Analyst & Whole Team | System Design and Prototype. |

**Team Members:**

1. Harshith Martha (TZ18899)

Role: Project Manager

I'm a graduate student in Information Systems at the University of Maryland Baltimore County. With a background as a mobile app developer, I'm dedicated to deepening my knowledge in information systems. My goal is to work as an analyst in companies that align with my career objectives.

1. Sai Sri Harsha Kumbam (EF41093)

Role: Quality & Operational Supervisor

I completed my bachelors in Electrical and Electronics Engineering. After my undergraduation I started working in Cognizant as a Programmer Analyst, this role has provided me to delve deeper into the field of data and the importance of information systems. My area of interest includes Machine Learning and Data Science.

1. Jaswanth Ram Nagabhyrava (NW46934)

Role: Process Analyst

I am a Automobile Engineer graduate, now having interest in Information Systems and focusing on how AI systems work and also looking towards lending my knowledge skills in this field and gaining real world experience of the newer technologies in this field.

**Weekly Meeting Times:**

Wednesday: 1:00 PM - 3:00 PM

Friday: 4:00 PM - 6:00 PM

The team will meet for at least four hours every week to discuss the project's progress and any issues that arise as a result of these planned meetings. If additional meetings are necessary, they may be arranged to finish the project on time.