**IT 328 Memo: Regatta University’s Student Degree Progress Tracker Project**

Nathan Hallam

IT 328

Professor Tim Campbell

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TO: John Doe, Project Manager

FROM: Nathan Hallam, Information Technology Team

DATE: August 18, 2024

SUBJECT: Student Degree Progress Web Portal

**Purpose:**

For this project we are tasked with creating a well designed student web portal to review and track the student’s progress towards their given degree. Stated in the project scenario; we are tasked with creating a web portal that is user-friendly, accurate, and fast-responding interface so that students can easily track their progress and know that their information is up-to-date. Further details are given by the project charter under the description: we must create a user-friendly graphical user interface (GUI), create necessary back end infrastructure to facilitate the GUI, and to have necessary information be securely exposed to the GUI. Current back-end systems should be leveraged and modified as necessary to facilitate any new or modified information being used by the web portals GUI. Creating the means of providing any information outside of the degree tracker is out of scope as well, as enhancing any current functionality.

**Key Roles and Stakeholders:**

The project charter lists the team members and their respective roles for this project: John Doe as Project Manager, Shila Cole as Systems Analyst, Ana Fischer as Middleware Application Developer, and John Jones as Backend Systems Analyst. Jane Smith will be sponsoring the project (Appendix A). I will be assisting the team throughout the testing period described in tasks 13 and 14 of the gantt chart - ensuring that the systems created are usable from the end-users perspective, that the web portal is fast, easy to use, and conveys the information properly and in an understandable format.

Arthur Bowman will be the project's core stakeholder. Additional stakeholders may include Regatta University President Martha Yoon, Regatta University Office of Enrollment, and Regatta University’s academic advisors. The Office of Enrollment and the university's academic advisors have provided us with the constraints for the project listed in the project charter.

**Constraints:**

As described in the charter, scope has been limited to work on and for the degree progress tracker with no alterations, additions, or improvements to the current system of which we will be working with. No additional funding will be provided to the project and a timeline has been given for when each milestone should be completed. While all three constraints have been defined in the charter the timeline is the most thoroughly defined and as such may be the hard constraint that we will need to work around. The risk matrix helps to support this theory by having multiple risks related to the release schedule for the project - one revolving around stakeholder responses to deliverables, and another on the rollout period for the go-live (Appendix B). The scope while defined in the charter is ambiguous with regards to what graphical elements should be made for the front end of the web portal. This ambiguity is also mentioned in the risk matrix. Budget feels like the most flexible constraint working as a bridge in the lack of time and ambiguous scope for the project. Hiring additional hands or subscribing to a program can help with creation and management of the new systems being created for this project, especially in regards to the GUI of the web portal.

**Risk Analysis:**

Given the risk matrix (Appendix B) for this project it is important to reduce the likelihood of each occurring and thus increase the likelihood of the project's success. The issue of the project’s scope ambiguity in regards to the graphical elements not being precisely described is one such issue that can be resolved before the project begins. If this risk were to be left unattended it would leave a great amount of interpretation and test work on the team. This open interpretation may delay any dependent tasks revolving around the design of the GUI. These tasks are labeled in the WBS of the project management documents. Some of these tasks are the backend integration, the actual creation of the GUI, and the testing of the web portal. A long delay will push the schedule back to an unreachable point and as such putting strain on the team as well as project scope and budget in order to keep the designed schedule. By resolving the scope issue now we will save ourselves the issues later down the line. First we must get bullet point detail from stakeholders on the information that must be displayed in the web portal. While some information has been given in the project charter it is not enough for the front end developer to begin work. The more detail is given on what, when, and where each UI element should be displayed the less ambiguity will be present and the more defined the scope will be. After the stakeholders have been consulted with, the team can look at the given details from the stakeholders and the project charter to come up with a design meeting the designated criteria given. Information similar to what can be found in the project scenario of the project documentation: a user-friendly interface connecting to a flexible, powerful, information structure that allows students to access an accurate, and instantaneous informational degree tracking tool showing progress towards their degree completion. This gives an additional framework to build off of when designing the GUI. However finer details can not be scrapped from the given documentation and will need to be obtained from the stakeholders, if not additional information on the GUI’s layout can be acquired then development time of the GUI’s design may run over or otherwise require additional resources to be completed on schedule. Ultimately it will depend on when and where information of the degree tracker should be displayed and the discretion of the designer, leaving the risk not completely mitigated but reduced in likelihood.

**Summary:**

The given project tasks the team with creating a web based application that will allow students to track their progress towards attaining their degree. This information must be easily accessed, easy to understand, secure to obtain, fast to update, and accurate. The team will consist of mainly four developers with a manager and a sponsor. The project has a set time frame to be complete and can not run over. Despite this there is ambiguity in the project scope with regards to the GUI design. More detail needs to be given by stakeholders on what, when, and where information should be displayed to the user else it be left up to the designers to scrape ambiguous information from the project charter to come up with a rough guideline for the design of the GUI. Neglecting this risk will cause delays in the schedule or compromise the general quality of the product due to stress from overwork.

**Appendix A - Project Organization** **(Project Charter)**

| **Role** | **Name(s) – Department(s)** |
| --- | --- |
| Project Sponsor | Jane Smith |
| Project Manager | John Doe |
| Core Stakeholder | Arthur Bowman |
| Vendor Resources | None |
| Project Team Members | Shila Cole, Ana Fischer, John Jones |

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**Project Team**

John Doe, Project Manager

Shila Cole, Systems Analyst

Ana Fischer, Middleware Application Developer

John Jones, Backend Systems Analyst

**Appendix B - Project Risk Matrix (Project Documentation)**

| **Project Risk** | **Likelihood** |
| --- | --- |
| There is a risk that severe weather in Sailcloth, Maine (the main campus that houses the development team), will close the campus and impact progress. | Medium |
| There is a risk that the ambiguity in the project scope (it only defines "graphical element" but not what type) will lead to requirement changes by the stakeholder during development, affecting both the budget and schedule. | High |
| There is a risk that sign-off on project deliverables (charter, Gantt chart, product approval, etc.) from project sponsors and stakeholders exceeds the allotted time. This decision delay will impact the progress schedule. | Low |
| There is a risk of rollout issues when deploying to production due to the complexity of merging code with the "go-live" of another project on the same system. | High |
| Two projects are currently being developed at the same time in the same code base. Delays to the secondary project will cause delays to the Student Progress go-live. | High |
| The student portal where the project will be deployed is a high-availability system and is expected to be accessible for students 24/7. There is a risk that the large number of changes occurring during go-live could take the system offline, temporarily impacting system availability. | Low |
| There is a risk that an interpersonal conflict will arise within the team, impacting the human resources assigned to the project and potentially impacting the allotted schedule. | Low |