

Introduction

This project consists of building a Course of Study system in which faculty would be able to submit a form based on their needs including add a class, change a class, remove a class and offer a class in online format. This system is already built on the Rutgers New Brunswick Campus by an IT member there, Sharif. Other than Eric and John, Sharif played a role in helping the team plan accordingly to ensure that we had all the information we needed to build the system properly. This would consist of meeting with Sharif to view demos of his software and having Sharif proof the diagrams and other work produced.

Project Description and Requirements

We were required to build a web application which allows faculty to choose from four different forms which they can submit for further review by department chairs. This includes Add, Change, Remove and Offer Existing Course Online. Faculty should be able to save forms and come back to them later. They should also have access to all the submitted forms and have a medium which allows them to check their submission status. Each of the four forms should match the format given by Sharif and should have the same field which he used. We must also implement the approval process given to use by John and Eric which has been approved by staff in charge of reviewing faculty forms.

Designs

As a means for planning/ designing the front end of this application we built wireframes. Wireframes are a way to plan the physical layout of the website without using any code. This can be done on paper or using any graphical editing tool. In our case, we used Figma. In creating the use case and UML diagram I used online visual paradigm. These consisted on the cornerstones of the system and help me to better see the entire layout of the system before building the database or coding anything.

Issues

After building the use case diagram, at the very beginning of the project, there were issues with the approval process. At the start this wasn't too clear so we met with John and Eric to clear this up and they reassured us not to worry about this now because they are waiting on other staff to give them the finalized version of the approval process that they will follow when the system is fully implemented.

Some other issues I ran into were in building the database. Issues such as how many tables there should be and what each table should be for. For instance, I thought that the database tables should be split based on the form they belonged to, then came to the realization that it would lead to a lot of redundancies in the database in terms of primary keys which wouldn't make sense. I also had some trouble deciding one whether the field from the approval_log table should be combined with that of the course_of_study_form table, which already had many fields because of all the possible form fields.

Currently I am learning how to automate creation of formId and logId and am having issues but in time I will learn it.

Achievements

I managed to build the database and get it up and running on a local wampp server. This is a big achievement because of its importance in the web application. It's where all the form inputs are being stored and retrieved for faculty and the approvers.

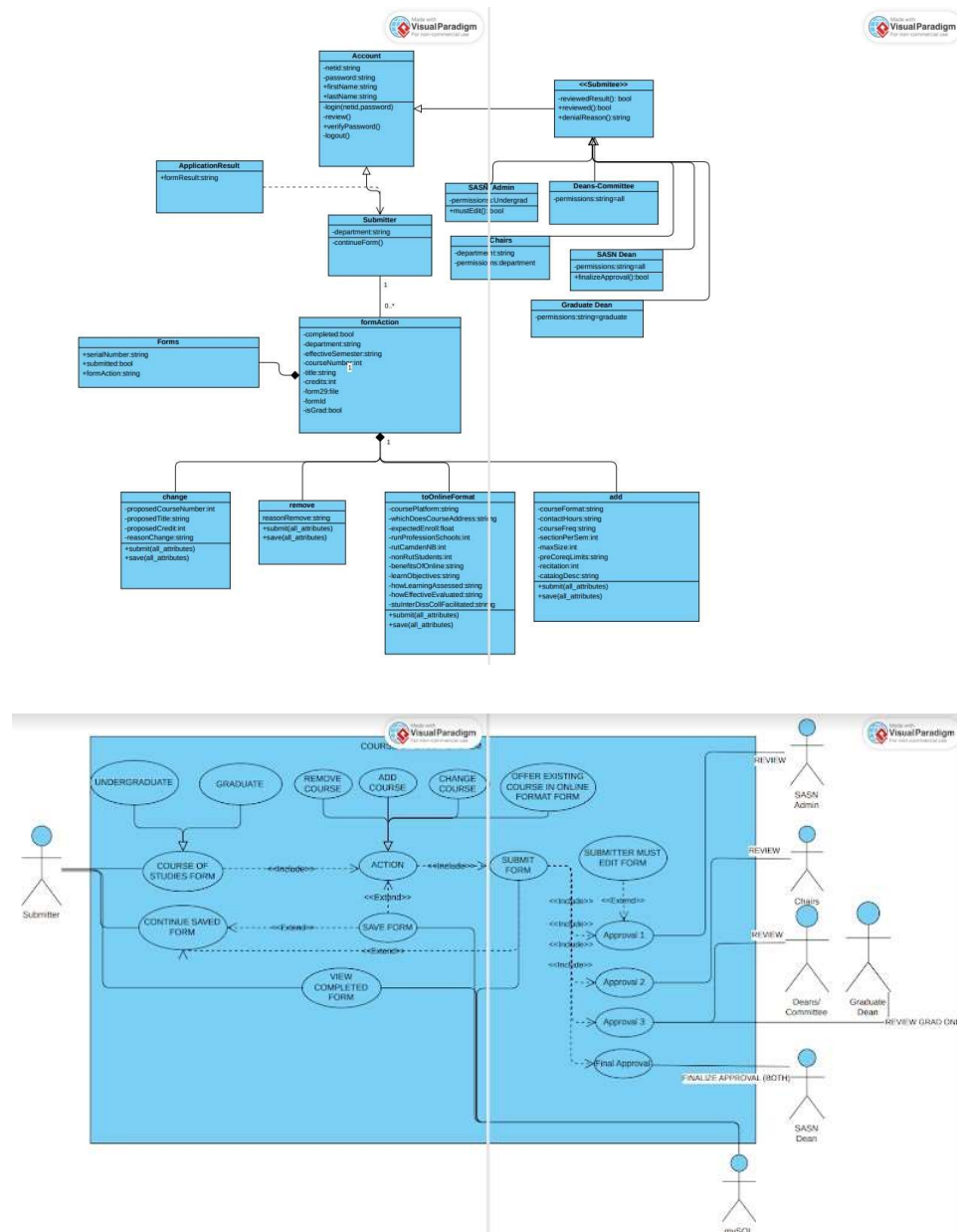
Goals

My goals are to get the ID automation up and running soon so that it can be used in the testing stages of the web application. I also want to generate some dummy data, about 15 records, that the team can work with and play around with to test out the ID generation and see if there are any problems that need to be fixed.

Plans for next steps

Now that the database is up and running, we have a partially finished front end and a partially finished backend it is a matter of time before those parts of the project are done. I will continue to work on automating the IDs in the database and generate dummy data that can be used to test the database and frontend to see what errors might come about.

UML Class Diagrams and Use Case Diagrams



Tools

Figma, online visual paradigm, lucid chart, and mySQL workbench

Technical Specifications

Figma 9.0, Visual Paradigm 17.0, MySQL Workbench 8.0.32

Conclusions

Although there is still much work to be done, there has been a lot of progress made in the past few months. We have majority of the project up and running with just a few components missing. Building the diagrams and holding meetings to gather requirements was a great help in building the platform with a solid foundation. Now it is just a matter of getting everything else done and beginning the testing stages of the project.

Bibliography

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