ITCS 4155

Ticketing System

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# **Initiation Phase**

## ***Project Background (1)***

The project is a ticketing system that allows staff and students to submit maintenance requests on the UNCC campus. Members of the campus will be able to access a website where they will create these requests that will be forwarded to campus technicians. The current maintenance system lacks organization and the request forum is nonfunctional. The goal of this program is for the users to easily submit and track work requests. Users will have the ability to monitor the status of their repair orders they submitted to the maintenance team. The benefits created from this project allow for an organized, straightforward and efficient system for not only the staff but also the technicians that will be given these requests. By implementing this system, maintenance requests will be handled efficiently, contributing to a safer and more functional campus environment.

## ***Scope Definition (1)***

Develop a ticketing system for staff and students of UNCC to report damages, maintenance issues or other concerns around campus. These requests will be forwarded to technicians on campus. The system will include a website for staff and students to submit their work order tickets. Technicians will be assigned to these orders and to understand the location of the problem there will be pictures of facilities for the request. Before submitting the ticket form, users will have to authenticate themselves to ensure they are part of the UNCC system. A map of campus will be shown when submitting a ticket to make navigating where the problem is easier for the student and also for the technician. A ticket tracking system will also be in place that will show the status of submitted work orders. Status updates such as open, in progress, resolved and closed will be shown to students and staff. Work orders submitted will be given priority/urgency levels depending on what the problem submitted is. To see the tickets submitted an admin portal will be made available to view the work order request.

## ***Assumptions (***1***)***

The development of the ticketing system is based on several key assumptions that support the project's usability and success. These assumptions will provide a foundation for the design and implementation of the system.

* There are maintenance issues on campus
  + These issues may vary from minor repairs to significant damages, and the system should be equipped to accommodate a wide variety of concerns
* Staff and students have access to the internet
* User familiarity with technology
  + This project assumes that the majority of users possess a basic level of familiarity with web-based platforms.

## ***Constraints (1)***

The Ticketing System we plan to accomplish has several constraints that may impact the time, budget, and scope of the project. These constraints must be addressed and carefully managed to ensure that the project is completed on time, within the given resources, and also while delivering the necessary function.

* Time Constraints:
  + Our project has a deadline that aligns with the academic semester. Each phase of the project including the planning, design, development, testing, etc. must fit within the timeline. As busy students, we must also allocate time to other things such as jobs, other classes, holidays, other projects, exams, and other commitments that could limit the time.
* Budget Constraints:
  + Since we are all students and are not getting a budget for this as it is a capstone project, we must use open source tools and frameworks that are free of cost. If we do decide to use platforms or tools that require money, we need to allocate and track our expenses.
* Scope Constraints:
  + The scope of this project is focused on delivering the essential features of the ticketing system. This includes ticket submission, tracking, user authentication, etc. While there may be many other applications and features that can be implemented, due to time and/or budget constraints, it would be best to stay within the defined scope to ensure the project meets the minimum requirements.

# **Planning Phase**

## ***Sprint Definition (5)***

This sprint will be used to organize, plan, and develop strategies to enable ourselves a clean and concise way to complete our project. Our planning will go over the strategies of enabling users to submit forms with different information such as pictures, descriptions, and intensity on a front-end interface. Along with this, this sprint will help better understand the hierarchy between student and staff reports. There will be a database to help track the submitted tickets from the users. We will update users who submit the report on the status of their maintenance requests to allow clear and precise communication. Finally, there will be a admin-portal for maintenance teams to have front-end access to see the current work-orders and other information for their maintenance requests.