Objectives and Scope

Activities/Project Management System for YHROCU

Written by Team 22 on 4th February 2025

Objective:

Develop a project/activities management system for non-crime related activities within the YHROCU (Regional police agency) that organises tasks into the project they are part of, alerts supervisors when new tasks are added or progress is made, has comprehensive searching, sorting and filtering systems for both task & projects and provides admin access to those that require it in the form of a web application with a Python back-end.

Scope:

- Ehtesham, Hammad, Humayun and Rahat are assigned to produce the SRS (Software Requirements Specification), SDD (Software Design Document) and any other relevant documents that will be delivered to the client.
- They are also tasked to work on non-deliverables that will be document the progress of the project and/or objectives and will just be used internally such as this document.
- Key functional features that will be worked on by the programming team (Hasan, Umair, Hamza and Humayun) will include, but not be limited to: Organising of Projects by Teams, Tasks can be created within the projects by users, Tasks can be assigned by supervisors, Supervisors can view all teams, projects and tasks, A filtering system for tasks and projects, Admins can create, delete and modify users as well as edit projects and tasks, Only Admins can delete tasks and projects.
- Non-key functional features that may be important but won't be a priority unless key functional
 features are fully implemented include: Email alerts for task updates and creation, Export feature
 for data by supervisor, Recycle/Archive bin that can include tasks/projects that have been
 recently deleted by admins, Security features such as open-auth, etc.
- Deadline for SRS draft should be on Wednesday 5th Feb, deadline for final draft on Tuesday 11th
- Any features that aren't required will be additional, not required to complete non-key functional requirements if time constraints
- After/During programming the Testing team (Ehtesham, Hammad, Hamza & Hasan) will make sure everything works and rigorous fall-back measures are in place (i.e. exception handling, etc.)
- Deliverables will include but may not be limited to: SRS, SDD, Working System, Testing Reports,
 Software documentation

Project Goals:

MAIN GOAL: Ensure a working system for tasks management with at least the key functional requirements, with non-key functional requirements implemented as well given time constrains and potentially optional features as well.

- Anyone can create tasks as part of their project, this will be done through a web-based interface hosted through Python with Flask.
- Users and supervisors do not have permissions such as tasks deletion and user creation. No matter the circumstances. Such permissions are only granted to administration.

- System should allow supervisors to view all projects and tasks. This can be done via a comprehensive dashboard page that provides a read only oversight.
- Tasks should include Titles, details, progress status and dates (due and assigned)
- Users should be able to provide task progress updates as part of the whole project, not individual tasks.
- Individual task assignments should be possible by supervisors within projects so that not all individuals are being sent alerts for the same tasks.
- Comprehensive filtering, searching and sorting systems should be setup for tasks and projects
- Send email alerts for tasks to supervisors when progress updates are made and if new tasks are created. Furthermore, send alerts for tasks assigned to specific users.
- Export to CSV and/or PDF feature for data by supervisor can be setup for monthly exports.
- Security features such as open-auth should be used if time permits
- Recycle/Archive bin that can include tasks/projects that have been recently deleted by admins
 can optionally be set-up as well.

Objectives and Scope

- Currently don't have that good project management, use Microsoft services but some issues with that:
- o Doesn't alert for tasks
- o If press delete gone forever, no recycle bin and anyone can delete
- o Doesn't provide oversight of all projects and filtering not as good
- o Cant give people on the same project different individual tasks
- Individual Tasks will:
- o Be part of projects but can be searched individually
- o Include Title and Details at bare minimum
- o Include Status of task New, In-progress, Completed, Overdue
- o Not include progress changes, but these will be included as part of the project
- o Include assigned and due dates and can be used to filter, sort and search
- Different roles and permissions are:
- o User Can view all tasks and projects assigned to them, can provide progress
- updates of their own tasks and that's about it, login internally as well
- o Supervisor Read only view of all tasks and projects, cant change anything though
- o Admin Can view and edit all internal data, create users, modify system, etc.
- Project goals are as follows:
- o Can create tasks (anyone) and filter, grouped by date and/or status
- o Admin features and supervisor read-only access
- o Ensure physical updates by user and not just percentages and stuff like that
- o Minimum security, not an open system, internal, only need username and password
- then to login, registration completed by admins
- o Interns and permanent staff should be separated, search projects by teams
- o Prioritise basic functionality of system over security and finer details
- o Tasks will be updated at least once a week but probably whenever, exports monthly