**Task Manager- Project Management Tool**

Design and build the application to manage projects tasks.

The TaskManager application should support the following features:

Task can be of one of two categories, Bug or New Feature. New Feature can be postponed whereas Bugs not.

**Project has attributes like**: Title, Description, Project Manager, Team Members. Team member can be a Dev or QA.

**Each task has attributes like**: Title, Description, Start Date, End Date, Estimated Time, Priority, Status.

**User has attributes as**: UserName, Email, Password, Role.

**Bug as specific attributes**: Source File Name, LineNumber and Severity whereas **NewFeature has specific attributes** like ModuleName and ChangeRequest Number.

Application should manage group of Users and Projects. Each project will have multiple Tasks and each Task can have comments.

Application should support following actions:

1. Application should allow user to login to the application with email and password.
2. Application should manage the user creation with role assignment.
3. There will be four user roles like site admin, project manager, developer and QA.
4. SiteAdmin role can create new user and assigned to one of the roles.
5. Site Admin can create new Project and assign project manager.
6. Project Manager can able to see his own projects.
7. Project manager can assign developers and QAs to the project.
8. Project manager can create a Task.
9. Project manager can able to view, edit delete Tasks of the project that he owns.
10. Project manager can assign a task to a Developer or QA.
11. Task can be in different status like: Open, In-Progress, Resolved or closed.
12. Developer can view his own Tasks (Assigned to him/her).
13. Developer can able to view the selected Task Details.
14. Developer can update the Task Status from Open to In-progress / On-hold / Resolved.
15. Developer can add comments to the Task.
16. Developer can assign the task to QA.
17. QA can test the Bug/Feature and close the task or add his comments and reopen the same.