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Society Sphere

Project Phase 1

Task 1)

Mention the Software Process Model that will be used in the development of your Software. Discuss the reasons for using the process model and why is it most suitable to your project?

Software Process Model

For the development of the Society Sphere platform, the Agile software development process model will be used. Agile is chosen for its iterative and flexible approach, which is well-suited to projects that require frequent feedback, adaptability to changing requirements, and collaboration between stakeholders.

Here's why Agile is the most suitable for this project:

Iterative Development: The iterative nature of Agile allows for incremental development, where features are developed and delivered in short iterations called sprints. This enables early and continuous delivery of valuable functionality, allowing stakeholders to provide feedback and make necessary adjustments throughout the development process.

Flexibility: Agile methodologies emphasize responding to change over following a rigid plan. Given the dynamic nature of community management and the evolving needs of residents and administrators, the flexibility offered by Agile allows for adjustments to be made to project requirements and priorities as needed.

Stakeholder Collaboration: Agile promotes regular and close collaboration between developers, stakeholders, and end-users. This collaborative approach ensures that the developed software meets the needs and expectations of both residents and administrators, resulting in a more successful and user-friendly platform.

Continuous Improvement: Agile encourages continuous improvement through regular reflection and adaptation. By regularly reviewing the software and processes, the development

team can identify areas for improvement and make adjustments to enhance the quality and functionality of the platform.

Early Delivery of Value: Agile prioritizes delivering working software early and frequently. This means that essential features and functionalities can be delivered to users sooner, providing immediate value and allowing for early validation of the software's effectiveness.

Overall, the Agile software development process model is well-suited to the Society Sphere project due to its flexibility, iterative nature, emphasis on collaboration, and focus on delivering value to stakeholders.

Task 2)

Write at least 5 functional and 3 non functional requirements related to your project.

Functional Requirements:

User Authentication:

Users (residents and administrators) must be able to securely log in to their accounts using credentials.

New users should be able to sign up for accounts by providing necessary information.

Complaint Management:

Residents should be able to submit complaints or service requests through the platform.

Administrators should be able to view and manage complaints, assign them to relevant personnel, and track their resolution status.

Billing Management:

Administrators must be able to generate bills for community services such as maintenance, utilities, and amenities.

Residents should be able to securely view their bills, understand the breakdown of charges, and make payments through the platform.

Visitor Management:

Residents should have the ability to register visitors by providing necessary details such as name, contact information, and duration of visit.

Administrators must be able to approve visitor registrations, ensuring security within the community.

Property Transactions:

Residents should be able to list properties for sale or express interest in purchasing properties through the platform.

Administrators should facilitate property transactions by providing necessary documentation, overseeing the process, and ensuring transparency.

Non-functional Requirements:

Security:

The platform must implement robust security measures to protect user data, including encryption of sensitive information and secure authentication protocols.

Performance:

The platform should be responsive and able to handle multiple users concurrently without significant degradation in performance.

Usability:

The user interface should be intuitive and user-friendly, making it easy for residents and administrators to navigate the platform and perform tasks efficiently.

These requirements are essential for the successful development and deployment of the Society Sphere platform, ensuring that it meets the needs of both residents and administrators while adhering to quality standards and user expectations.

Task 3)

Mention different roles that each member will play in your group project.

Team Duties:

Member 1: Ayza Tahir (21L-1854)

- **Scrum Master / Developer / Designer / Database Administrator :**

Responsible for overseeing the project timeline, coordinating team meetings, monitor progress and report on the project's status.

Develop core functions of the application in collaboration with other team members.

Design the user interface (UI) and user experience (UX) of the platform for optimal usability

Design and implement the database structure for the Society Sphere platform.

Member 2: Maham Javed(21L-1845)

- **Developer / Designer / Database Administrator /User Experience Engineer :**

Develop core functions of the application in collaboration with other team members.

Design the user interface (UI) and user experience (UX) of the platform for optimal usability

Design and implement the database structure for the Society Sphere platform.

Conduct user research and analysis to understand user needs and preferences.

Member 3: Ali Farooq(21L-5088)

- **Developer / Designer / Database Administrator /User Experience Engineer :**

Develop core functions of the application in collaboration with other team members.

Design the user interface (UI) and user experience (UX) of the platform for optimal usability

Design and implement the database structure for the Society Sphere platform.

Conduct user research and analysis to understand user needs and preferences.

Member 4: Alina Abid(21L-5313)

- **Developer / Designer / Database Administrator / Tester:**

Develop core functions of the application in collaboration with other team members.

Design the user interface (UI) and user experience (UX) of the platform for optimal usability

Design and implement the database structure for the Society Sphere platform.

Assist in testing activities, including unit and integration testing, to ensure the quality of the software.

Member 5: Sadia Inayat(21L-1853)

- **Developer / Designer / Database Administrator / Tester:**

Develop core functions of the application in collaboration with other team members.

Design the user interface (UI) and user experience (UX) of the platform for optimal usability

Design and implement the database structure for the Society Sphere platform.

Assist in testing activities, including unit and integration testing, to ensure the quality of the

software