SCMP

Team 1

Real Estate Checklist Tracker

CS-673 (Software Engineering)

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Configuration Items

Code

- All source code (React, Node.js, and Socket.io) will be managed using Git in a GitHub repository.
- Version control strategies such as feature branching, pull requests, and code reviews will be followed to ensure consistency and avoid code conflicts.

Specification Documentation

- Documents such as requirements, design (Figma), timelines, and user stories will be stored in Google Drive, clearly named with version history to track changes. Important versions will be tagged.

User Documentation

- End-user manuals, tutorials, and guidelines for real estate agents, brokers, and clients will also be stored in Google Drive, ensuring updates are made with every major release.

Supporting Software

- End-user manuals, tutorials, and guidelines for real estate agents, brokers, and clients will also be stored in Google Drive, ensuring updates are made with every major release.

Source code version control

- GitHub will be used to manage the project's source code.
- The team will use a feature-branching strategy, where each feature or bug fix is developed in its branch and merged into the main branch via pull requests.

- Pull requests will undergo code reviews by the project manager before merging.
- The main branch will be protected, and no direct commits will be allowed. All changes must pass review before being merged.

Change Management

- GitHub will be used to manage the project's source code.
- The team will use a feature-branching strategy, where each feature or bug fix is developed in its branch and merged into the main branch via pull requests.
- Pull requests will undergo code reviews by the project manager before merging.
- The main branch will be protected, and no direct commits will be allowed. All changes must pass review before being merged.

Progress Tracking

- **Jira** will be used for tracking epics, user stories, and tasks. Tasks will be assigned to team members with estimated completion times.
- Team members will log hours spent on tasks and update the status regularly.
- Sprint reviews will be conducted to assess progress and realign with project goals if needed.

Build and Release Management

- Build will be released at decided intervals which will go through approvals from various stakeholders
- Builds will be tested by the **QA** and reviewed by the Product Owner before release.
- Only approved builds will be pushed to production, following review by stakeholders.

Audits and Reviews

- Before every major release, a review process will ensure that the configuration items (code, documents, and dependencies) comply with SCM requirements.

Tools and Resources

- **GitHub:** Source code management and version control.
- **Jira:** Task management, sprint planning, and change tracking.
- **Slack:** Team communication and notifications.
- **Google Drive:** Documentation storage and version control.
- **Figma:** Design tool for UI/UX workflows.

Risk Identification

- **Developmental Delays:** Delays in developing certain functionalities may occur due to unforeseen technical challenges.

- **Scope Creep:** New feature requests may arise, leading to increased workload and potential delays.

- **Team Member Unavailability:** The absence of team members due to unforeseen circumstances may affect project progress.

- **Code Merge Conflicts:** With multiple developers working on different parts of the project simultaneously, there's a risk of frequent merge conflicts when integrating code from different branches

- **Code Quality Issues:** Without consistent review, the code might not follow the same coding standards, leading to bugs and inefficiencies.

Risk Mitigation strategies

- **Developmental Delays:** A well-defined project timeline will be followed, and additional research will be done during the design phase to avoid delays.
- **Scope Creep:** Requirements will be locked in at the start of the project. Any new requests will be evaluated for feasibility and impact on the timeline before approval.
- **Team Member Unavailability:** Tasks will be evenly distributed and backups will be planned in case any team member is unavailable.
- **Code Merge Conflicts:** Developers will frequently pull from the main branch to stay up-to-date with ongoing changes.
- **Code Quality Issues:** Every pull request will be reviewed by at least one team member to ensure coding standards, readability, and maintainability are followed.

Conclusion

The team is dedicated to delivering a high-quality Real Estate Checklist Tracker. Adherence to this SCMP will ensure efficient collaboration, minimize risks, and promote smooth project execution.