**OS Upgrade Project for a Bank: Project Plan Report**

**Introduction**

IT infrastructure plays a critical part in companywide operations of the banking sector, as it is used to manage critical operations such as customer transaction or data management. An OS upgrade will keep the bank’s systems secure, compatible with the latest software and equipped to manage greater workloads. This project aims to achieve an OS upgrade for the entire bank to provide up to date, more secure and higher performing systems. The main achievement of this project is that this project will decrease risks for cyberattacks and make a more reliable bank, which will give positive atmosphere for bank employees and customers.

**Scope Statement**

OS Upgrade Project at the bank is about upgrading the operating systems to all the banking devices, servers, workstations and customer facing terminals. This project aims to protect the bank security posture by having the latest security patches and features added. The key objectives are as follows:

1. Select a Favorite OS and all critical systems must be upgraded to the latest version.

2. Make sure Upgrade process does not cause much downtime.

3. Ensure after upgrade system works as expected.

4. Train employees on the new OS features so they could be familiar with this.

Deliverables of this project are an OS upgrade plan, a completely upgraded system environment, and all procedures during an upgrade are documented. Systems directly involved in banking operations are what is included in this project boundaries, for example, customer service terminals and server on the backend. This upgrade is not applicable to systems that are not directly connected to banking operations, such as the personal laptop of the employees.

**Gantt Chart**

It means that the two time-related measures of the project will include a sequence based on dependencies of the next activity with the previous phase. Below is the Gantt chart detailing the timeline for each task (also shown in the visual representation shared earlier):

1. **Initial Assessment**: Oct 10, 2024 – Oct 23, 2024
2. **Develop OS Upgrade Plan**: Oct 24, 2024 – Oct 31, 2024
3. **Pilot Testing**: Nov 1, 2024 – Nov 13, 2024
4. **Full Deployment**: Nov 14, 2024 – Nov 27, 2024
5. **Post-Upgrade Testing**: Nov 28, 2024 – Dec 4, 2024
6. **Project Closure**: Dec 5, 2024 – Dec 11, 2024

It is defined where each activity starts and where it ends, some of them prerequisite that for instance full deployment cannot take place unless pilot testing has been done. The project also provides time margin for the unexpected delays along the project timeline.

**Risk and Issues Management Strategy**

In a banking environment where system failures could result in enormous losses, the OS upgrade project must be conducted with risk management at heart. Below are key risks identified for this project and their corresponding mitigation strategies:

**1. System Downtime**

* Risk: A long upgrade will cause outages in the banking operations.
* Mitigation: The upgrade will be performed during non business hours and redundant systems will maintain continuous availability.

2. Data Loss

* Risk: Data loss during the update process might occur if backups are not properly handled.
* Mitigation: Critical systems will be backed up completely; these backups will be validated.

3. Compatibility Issues

* Risk: The new OS may not be compatible with some banking software.
* Mitigation: The pilot stage will thoroughly test being compatible and resolve any such issues so that full deployment is ready to be implemented.

4. User Training Gaps

* Risk: New OS may cause inefficiency, because employees may not know it.
* Mitigation: To ensure their familiarity with the new system, a practice program is also launched so the employees will be comfortable with the new system.

The risk register will track all risks and they will be continuously managed for the entire project.

**Change Request Management Process**

A Change Request Management Process will be used to control any project scope, schedule, or resource changes for the project. It means that all changes would get reviewed, approved and they’d be documented before they are actualized. The steps for managing a change request are as follows:

1. Submit Change Request: A change request form can be completed by any member or stakeholder to submit an issue regarding the nature of a change and its effect.

2. Review: The change request will be reviewed by the project manager and other key stakeholders to determine whether it is feasible, and have what it will cost, and when it will take place.

3. Approval or Rejection: Changes approved will be made into the project plan, those approved will be documented with an explanation.

4. Implementation: Changes will be approved and assigned to the appropriate team members and tracked to completion.

With regards to documentation of the files on GitHub, upgrade plans, several testing scripts, among other contents, will be administered through GitHub. Every change request will map directly to a change request in GitHub, which can be collected in a single repository and used as a basis for approval before being included in the final alter.

**Configuration Management with GitHub**

GitHub will be the primary Configuration Management Tool in this project. This helps to manage the many versions and avoid confusion on the most current version widely shared and used by members of a particular project. Below is the step-by-step process for how GitHub will be used:

**1. Repository Creation**: Project files will be stored in a repository called Bank-OS-Upgrade, where the plan of OS upgrade as well as scripts for testing and other documents, will be placed.

**2. Branching Strategy**: Several branches will be employed in order to tear apart the changes. For example, the primary branch will include the project build containing no evolving changes, and there will be branches created from this main branch for activities such as “Pilot Testing” or “Compatibility Testing.”

**3. Commit and Push**: Team members will make changes to their project and then synchronize it with the specific remote repository.

**4. Pull Requests**: In this context there would be creation of a pull request before merging changes to the main branch. This enables other members of a team to assess the changes to structures and aspects to confirm whether or not they are in line with the set project requirements.

**5.Review and Merge**: After the changes have been approved by the coders who have been assigned to go through the pull request the changes will be merged into the main branch hence the repository containing the most approved version of the project.

Another advantage of using GitHub is the fact that it is designed can track changes and also provide a log file of all the activities done makes the process transparent and easy to work on.

**Collaboration Tools: Trello for Project Management**

The use of the Trello tool to track the project’s tasks and as the basis for effective team cooperation. Trello is an easy-to-use application for managing work in progress, creating a task list, and assigning the work to team members.

**1. Board Creation**: A Trello board will also be constructed with the name “Bank OS Upgrade” with three essential categories of To Do, In Progress, and Completed.

**2. Task Assignment**: It will be cards like “Develop OS Upgrade Plan” or “Pilot Testing.” Daily and weekly task assignments will be described in the respective cards, as for deadlines and team members.

**3. Tracking Progress**: The organization of tasks into the To Do, In Progress and Completed lists will mean that tasks will automatically be transferred from the To Do list to the In progress list and then to the Completed list as they are done. Terms like “High Priority” and “Low Priority” shall be assigned with tasks to differentiate between those, which should be considered urgent or not.

**4. Collaboration**: Card participants can write notes, include documents (For example, Gantt chart or plan to upgrade from the current system), and have live chats regarding new information added on a project.

After project completion, some sample screens of the boards used in Trello will be attached to the report to demonstrate the work of the teams.

**Conclusion**

The following project plan describes the systematic strategy for improving the current operating systems in a banking institution. Stemming from this approach, the purpose of this project is to ensure a safe OS upgrade from the existing Windows 7 to Windows 10 free from significant interference with banking operations, incorporating the foundational aspects of structured change management and configuration of software tools such as GitHub and Trello. Versioning on GitHub and Trello for mitigating work will allow the united team work effectively and all the changes will be carefully documented.

**References**

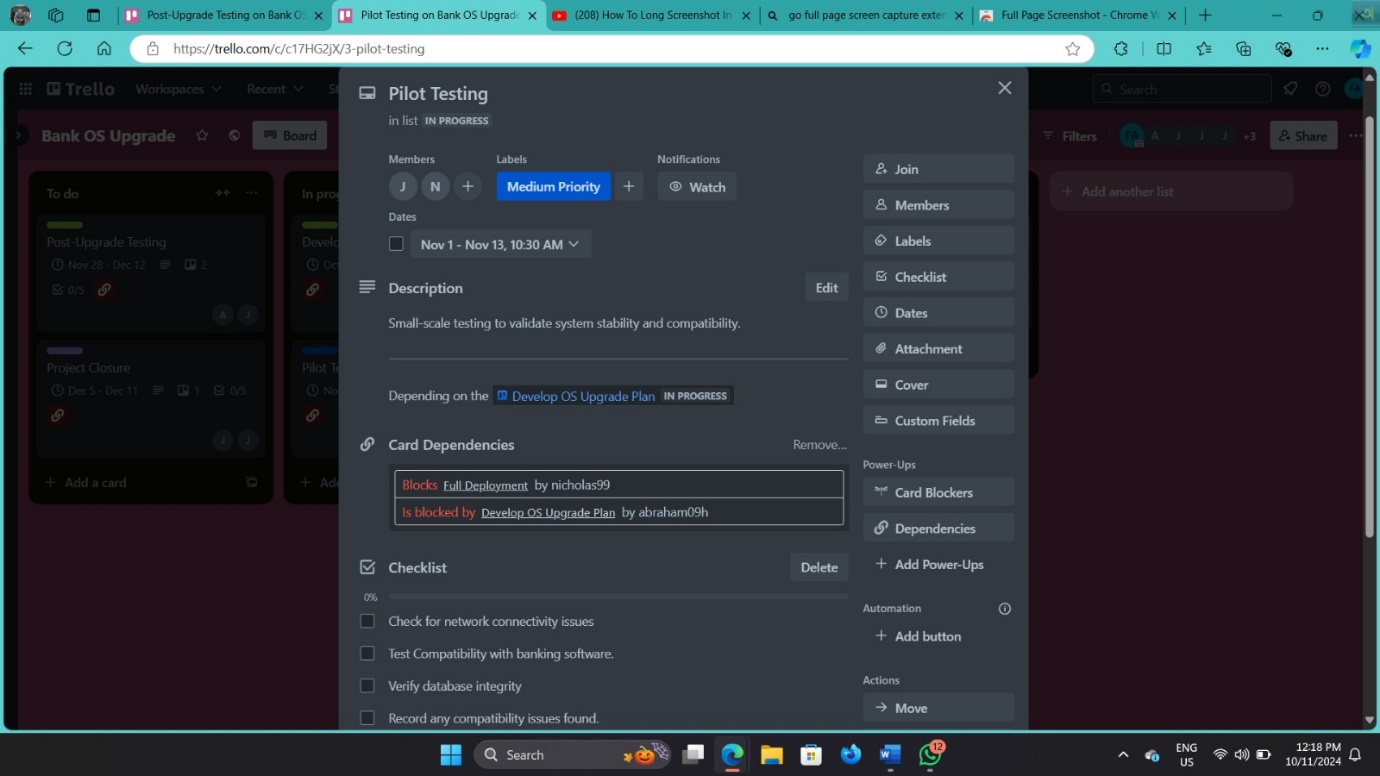
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3. GitHub, “Introduction to Git and GitHub,” [Online]. Available: <https://guides.github.com/introduction/git-handbook/>. [Accessed: 07-Oct-2024].
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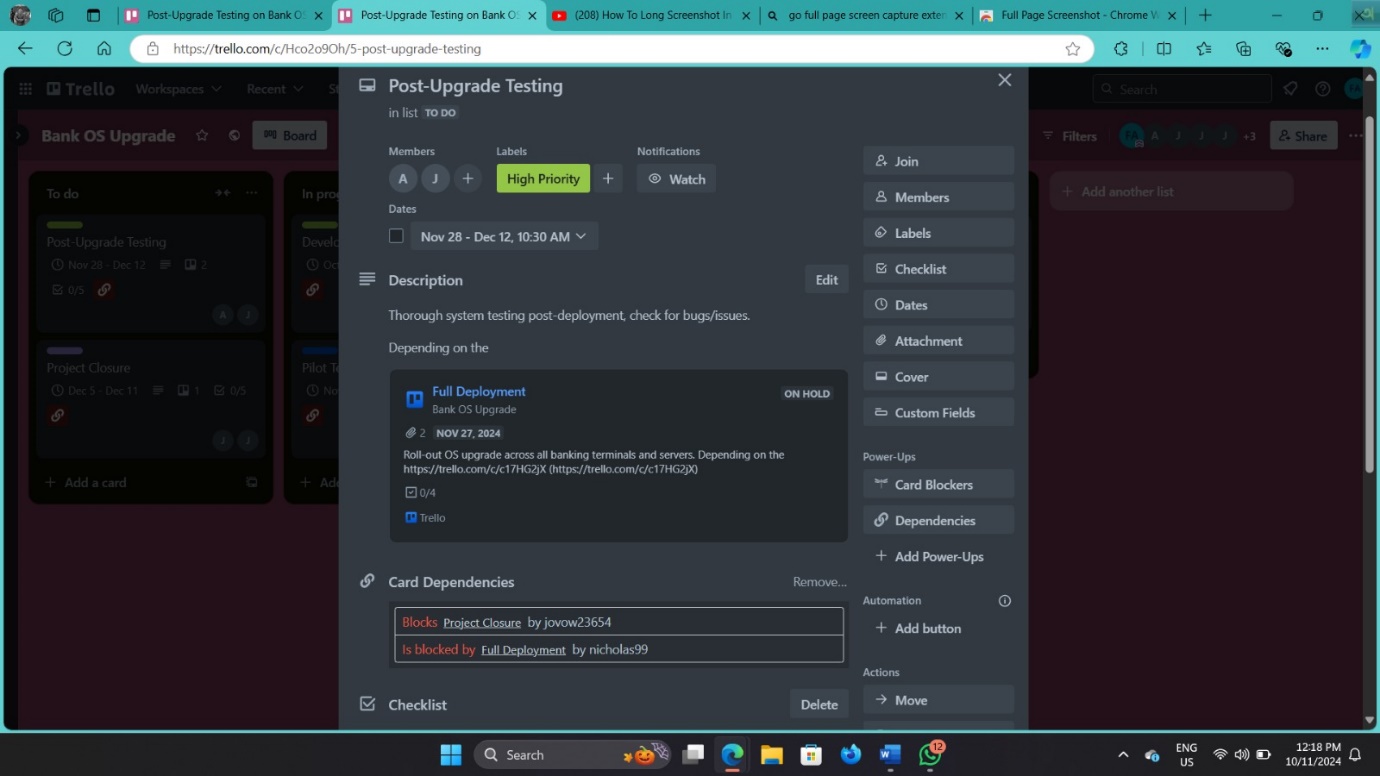
**Screenshots**

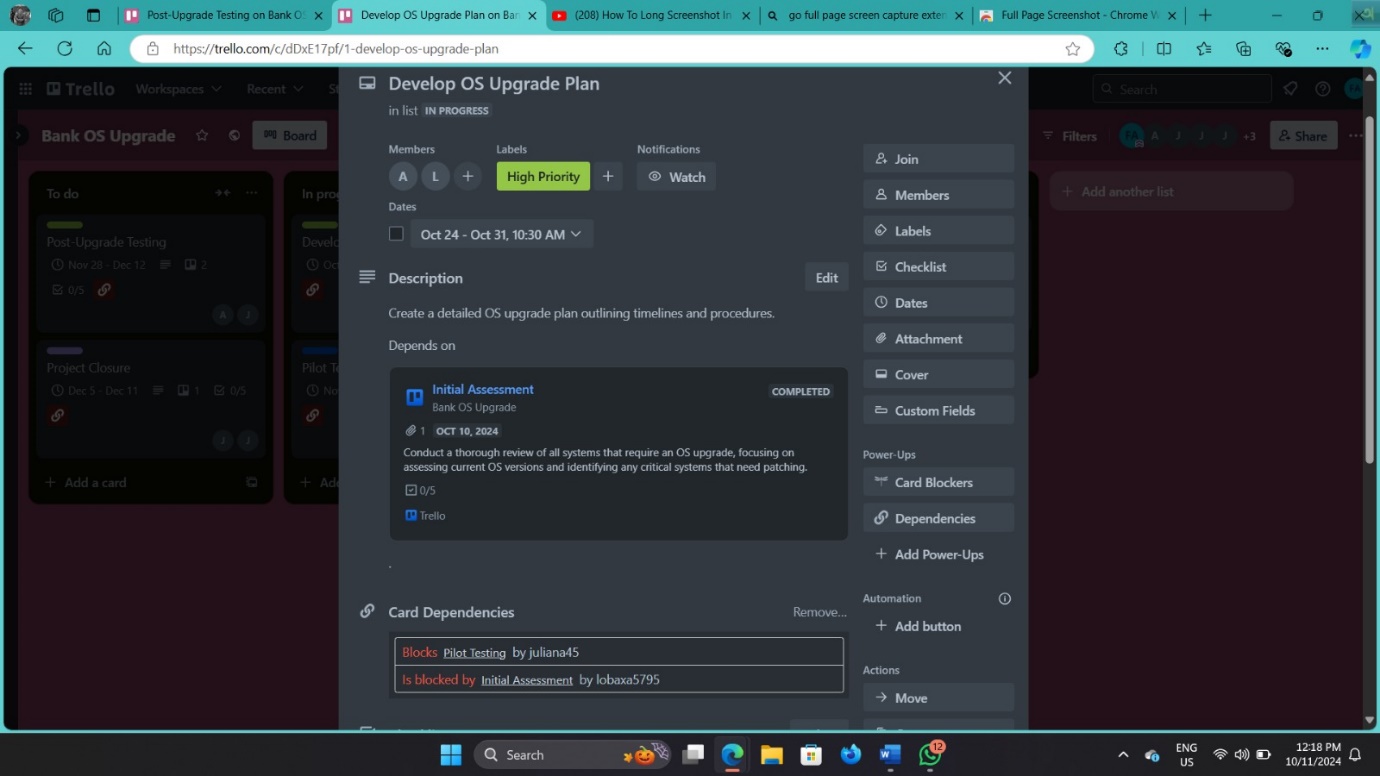
**Gannt Chart**

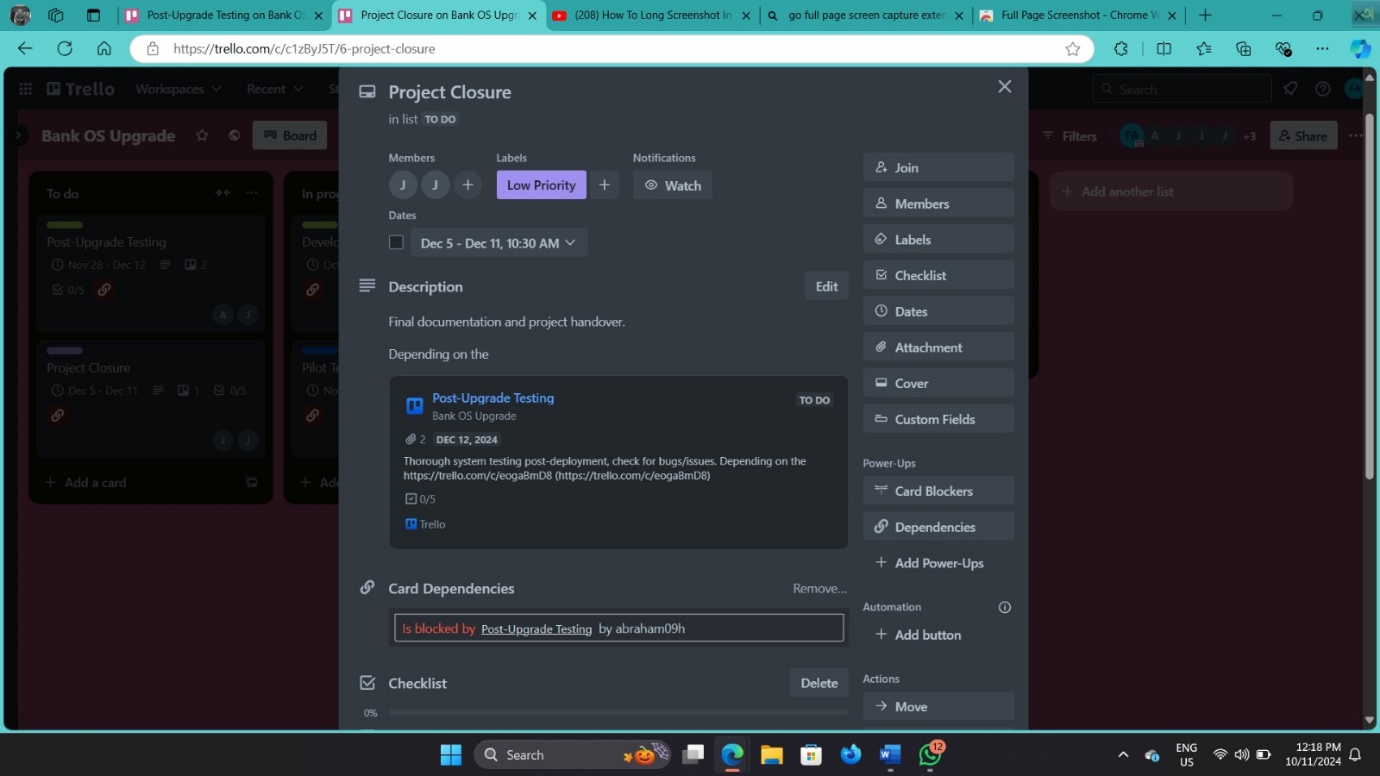
**Github**

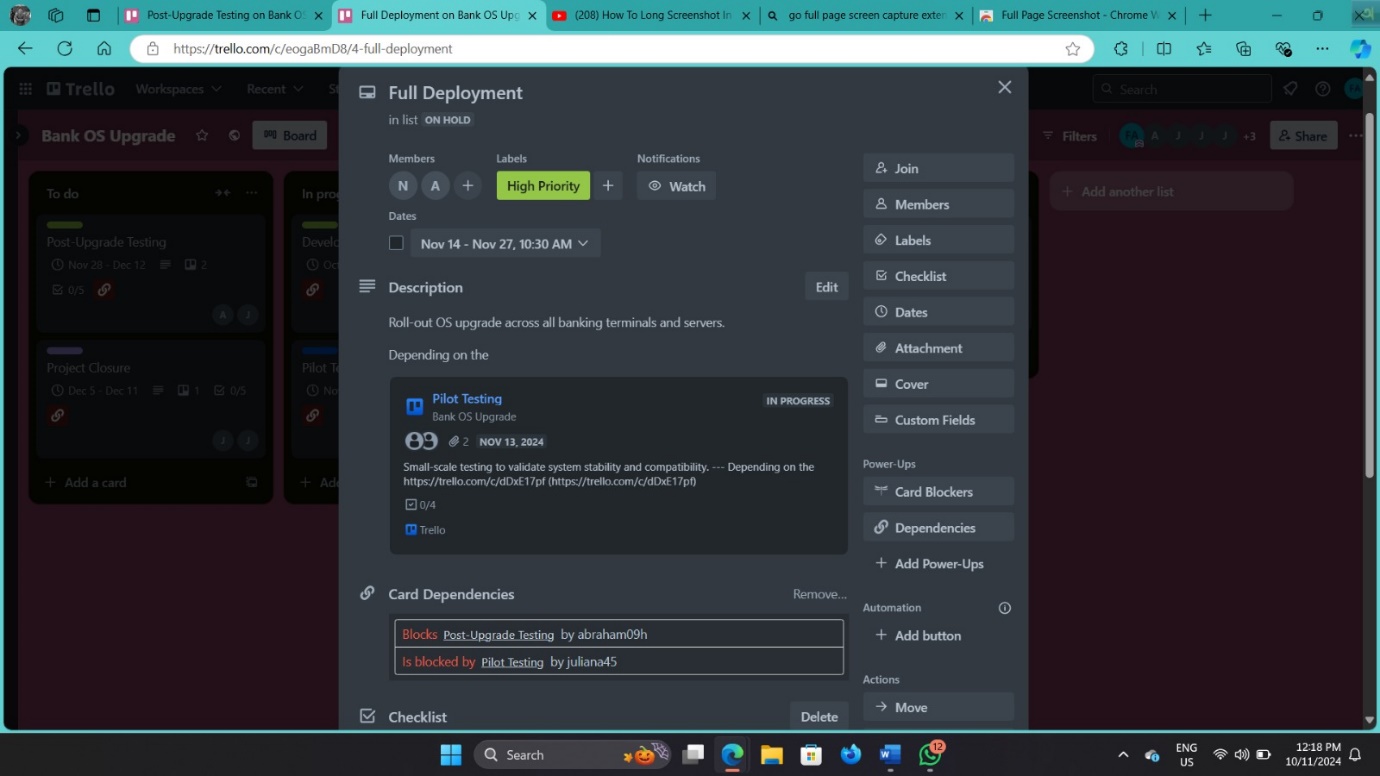
**Trello**

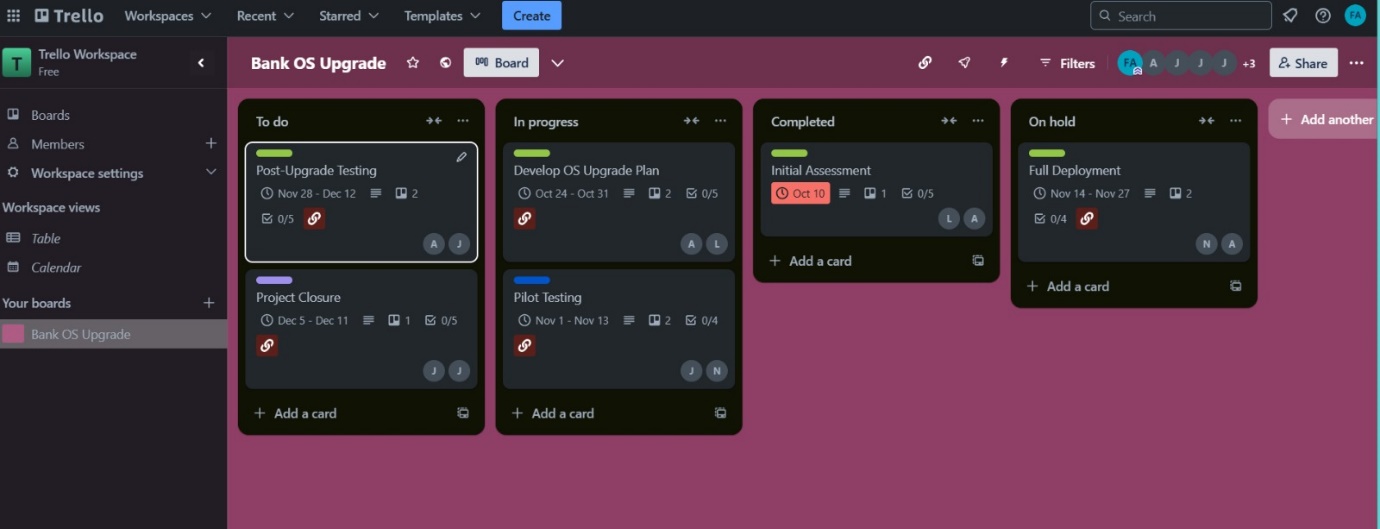










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