

VIP Website 9.0

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Current System

Version 8.0:

- Code environment is manually updated before deployed to server.
- Running the server requires a sizeable list of commands prior.
- Installation and setup is difficult to troubleshoot and scripts are scattered.
- Cannot visually determine if currently impersonating a user.
- Does not save logs of impersonated sessions.

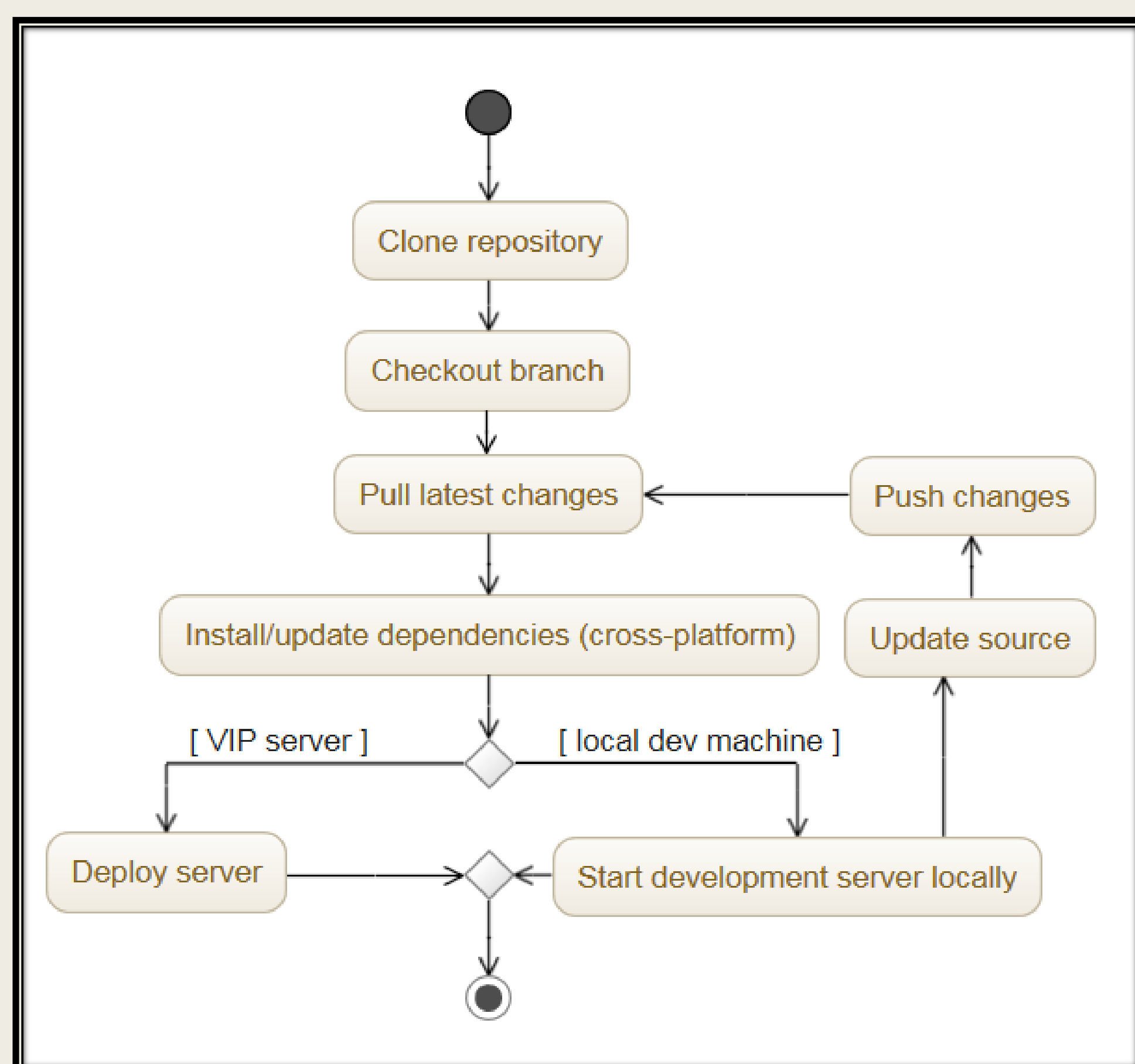
Problems

1. The current deployment setup for the web server is long, somewhat tedious, and difficult to understand.
2. The impersonation feature of the site needs to be updated to reflect the usage criteria of the faculty.

Requirements

1. Implement a method to change deployment strategy based on machine's environment.
2. Allow code to setup and run the server in a cross-platform compatible setup.
3. Remove redundant installation and setup scripts.
4. Reduce the terminal setup commands to less than 5 lines and consolidate them to all run via Git and npm (Node Package Manager).
5. Introduce a way to save and validate impersonation sessions.
6. Display a banner if a user is impersonated.

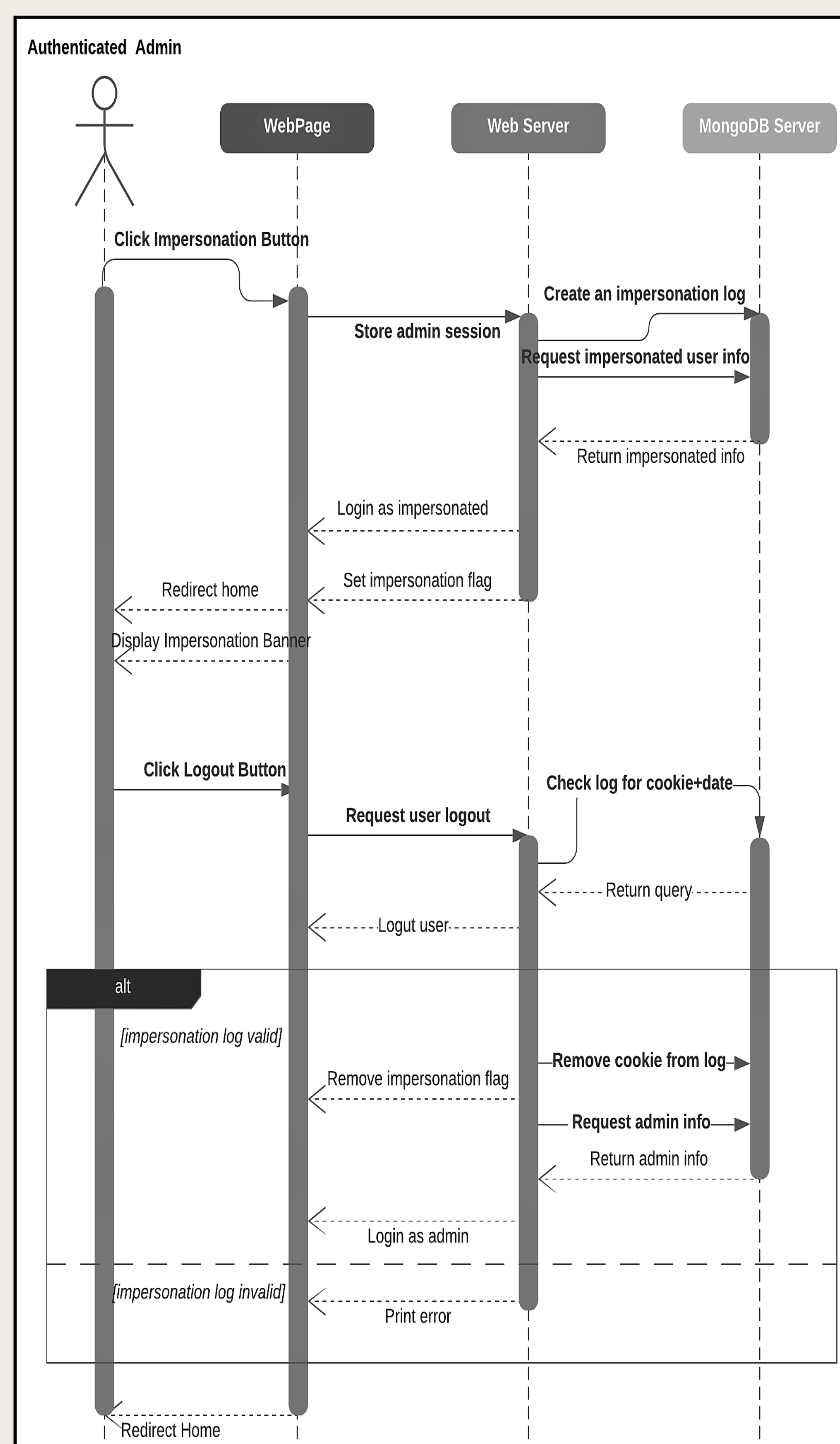
Problem 1: Simplified Activity Design



Implementation

- MongoDB – NoSQL Database
 - Express – App Framework
 - AngularJS – Front-end framework
 - NodeJS – JavaScript Runtime
- The MEAN stack was used for the development of this website.

Problem 2: Updated Sequence Diagram



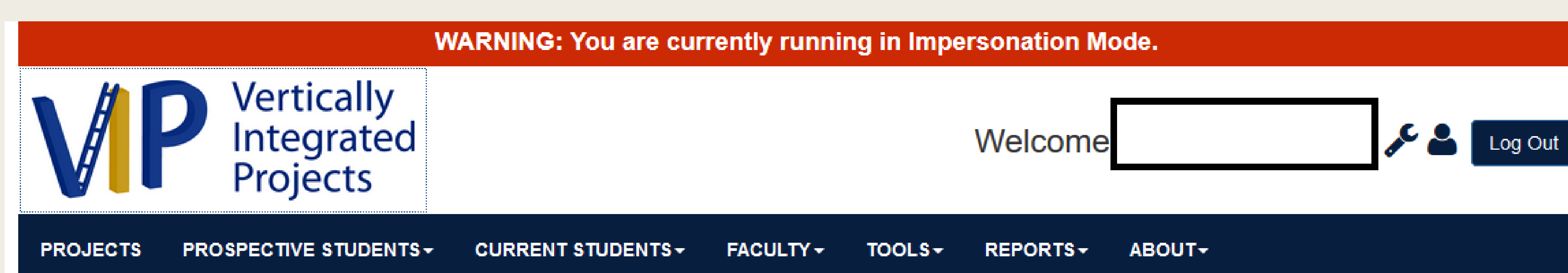
Verification

- Local testing done manually using a combination of local unit/integration tests.
- Deployment testing and troubleshooting done via various hardware.

Summary

- Reduced deployment time when a code change needs to be applied.
- Reduced setup complexity for the next set of developers.
- Impersonation feature is now more explicit and complete.

Screenshot



Acknowledgement

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