

**CSCE 606: SOFTWARE ENGINEERING**  
**Force Request System**  
**Iteration 0 Report**  
**Team: TitaniumSouth**

**Course Instructor:**

Prof. Hank Walker

**Team Members:**

Jianghao Shen (Product Owner)

Dongwei Qi (Scrum Master)

Jing Jiang

Fangsheng Wu

Cheng Chen

Lianghao Zou

We have been assigned to work on the Force Request System project. The force request system for the CSE department is a new system to manage force requests submitted by students to register for different courses which are filled up to its current limit offered. Advisors can log in as admins and use this system to prioritize the requests and handle them by accepting or rejecting them.

This semester's goal is to reach a test deployment with probably some desired new features, to determine whether we should go with this system or the LaserFiche-based system that other departments are trying.

Through communications with the grad advising office, the main content will include a pilot-test on a subset of grad courses. After a discussion with TA, we are currently focusing on running the project on AWS and deployment. Also, we are focusing on how to write test cases and collect user stories.

We will develop the system based on legacy code. The existing application developed through legacy projects allows students to make force requests and admin handle the requests. The student creates an account with the system using their email; which is then verified for their identity through directory search to ensure unique identities; account creation is confirmed via email and the user is redirected to the force request form. Future logins present the student with the view of the status of previously submitted force requests. Administrators, upon login, see the list of active force requests and are provided with the options to approve, deny or place the force requests on hold. When an admin changes the status of the force request the student receives an email notification. Also, it implemented the login & signup system and verification for students' identification. After signing up, the student can see or modify his information. Admins are allowed to add new users or requests apart from handle existing requests of the existing users.

After an overview of the previous team's code, we developed the following Legacy Code Improvement Strategy:

1. A large amount of code repetition is available and to make it better, we consider refactoring it and make it brief.
2. The flow of code is analyzed using pair programming.
3. We may optimize the controller and make it more specific. Also, some validations can be performed on the client-side.
4. Unit tests should be created for new methods in the system.
5. We will make the code structure clearer and try to make it more efficient.

### User-Stories Improvement

- 1.Students are not required to enter the specific system since if it is eligible, the course will be okay for registering.
- 2.All features that are not obviously shown on the page are now can be viewed clearly.
- 3.View details are replaced by more appropriate icons.
- 4.Every feature is enhanced so that very status is shown until the request is resolved by admin.