

CSE 545: Software Security

Secure Hospital System

Group 09 Weekly Report - 09

Person prepared this report: Kiran Shanthappa on 12pm 22nd Mar 2022

Person approved this report: Yash Bhokare on 3pm 22nd Mar 2022

Person submitted this report: Yash Bhokare

List of members

- 1. Yash Bhokare (Group Leader)
- 2. Kiran Shanthappa (Deputy Leader)
- 3. Anthony Mac
- 4. Rajesh Badugula
- 5. Shashank Baradi
- 6. Sai Manoja Gadde
- 7. Karan Naik
- 8. Bhaskara Atluri
- 9. Jayanth Gorinta

Meeting Notes

[Mar 18th, 2022 – 04:00 pm] - The agenda of the meeting was to get a status update on implementation progress and challenges faced. Meeting was scheduled from 4:00pm to 5:00pm in the Noble Library. All team members were present except for Rajesh. Progress of the week was discussed and some of the pain points addressed. Update from backend team: Have to work with the front end team to integrate the login protocols. Shashank hosted spring-boot authentication code on the cloud with a sample database. Bhaskara is continuing to implement malicious ML in such a way that the application locks the person from

logging in when the same IP fails 3 times. A 15 min cool -off and then if it fails again a 1 day cool-off. Also on the 2-factor authentication.

[Mar 18th, 2022 – 04:30 pm] - Update from the database team (Anthony and Manoja): Currently in the process of testing database triggers and foreign keys. Support for the database integration with the backend team. Update from front-end team: Karan finished integrating all the pages UI web pages.

[Mar 18th, 2022 – 04:45 pm] - Update on hyperledger: Kiran finished hosting hyperledger fabric and chaincode in the cloud. Performing client API testing. Update on integration team: Yash completed the login page with authentication services at the front end. Working on integration with the backend team.

Tasks Summary

Task No.	Task Name	Details of Task	Member	Status
1	ML for malicious login	Preparation of dummy data	Anthony and Manoja	Ongoing
2	Malicious Login	Develop ML based malicious login	Bhaskara	Ongoing
3	Database Testing	Testing the database triggers and foreign keys. Hashed data storage.	Manoja, Anthony	Ongoing
4	Integration Testing	Testing Front-end and backend integration points.	Shashank, Yash	Ongoing
5	OTP with email	For two-factor authentication build API to send OTP via email.	Bhaskara	Ongoing
6	Login Authentication	Login page with authentication services at the front end.	Yash, Shashank	Ongoing

7	Blockchain	Prepare sample data for blockchain integration	Jayanth,	Ongoing
	Integration and	and testing.	Kiran	
	Testing			
8	Application	Application functionality testing	Yash	Ongoing
	Testing			
9	Project Report	Project report preparation	Kiran	Yet to Start

Task Progress

Task Name	Member	Date of Review	Reviewer(s)	Review Conclusion	Recommend ed Action
Login and Registration	Yash	Mar 21st	Karan	Satisfactory	
Implement Hyperledger on AWS	Kiran	Mar 21st	Jayanth	Satisfactory	
Hyperledger client API	Kiran	Mar 21st	Jayanth	Satisfactory	
JWT Authentication with roles	Bhaskara, Jayanth	Mar 21st	Yash	Satisfactory	
Insurance Web page	Karan	Mar 21st	Yash	Satisfactory	
Database Connection API	Yash	Mar 21st	Anthony	Satisfactory	
Hosting application on AWS	Shashank	Mar 21st	Manoja	Satisfactory	

Issues

- 1. Integration testing requires a combined effort.
- 2. Application development has issues with login authentication. Team is currently working on it.
- 3. Slight delay in testing due to new issues in development. Need to put in extra effort over the weekend.
- 4. Organization of the work due to interdependencies of different components.

Gantt chart

