CSE 545: Software Security

Secure Hospital System

Group 09 Weekly Report - 08

Person prepared this report: Kiran Shanthappa on 12pm 15th Mar 2022

Person approved this report: Yash Bhokare on 3pm 15th 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 11th, 2022 – 04:00 pm] - The agenda of the meeting was to get a status update on implementation progress and challenges faced. As team members dispersed due spring break meeting was scheduled from 4:00pm to 5:00pm over zoom. Progress of the week was discussed and some of the pain points addressed. Update from backend team: Shashank hosted spring-boot authentication code on the cloud with a sample database. Have to work with the front end team to integrate the login protocols. 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.

[Mar 11th, 2022 – 04:30 pm] - Update from the database team (Anthony and Manoja): Currently in the process of testing database triggers and foreign keys. Also waiting on confirmation from the backend team about what format the passwords go into the database. Update from front-end team: Karan finished integrating all the pages UI web pages.

[Mar 11th, 2022 – 04:45 pm] - Update on hyperledger: Kiran and Jayanth working on the client API for interacting with the Hyperledger fabric. Update on integration team: Yash completed the login page with authentication services at the front end. Working on integration with the backend team.

[Mar 11th, 2022 – 05:00 pm] - As many of the team members have mid-term work load for the week 09 has been reduced till friday.

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	Login and Registration	Implementing the login and patient registration web page	Rajesh	Ongoing
3	Implement Hyperledger on AWS	Implementation of Hyperledger on AWS. Creating network, peer, ordering service.	Kiran	Ongoing

4	Hyperledger client API	Implement client API to connect and send transactions to the Hyperledger blockchain.	Jayanth and Kiran	Ongoing
5	JWT Authentication with roles	Implementation of APIs based on Spring-boot for interaction of JWT authentication with database. Creating new roles for the same.	Bhaskara, Shashank	Ongoing
6	Insurance Web page	Build Insurance web page for claim request and approval	Karan	Ongoing
7	OTP with email	For two-factor authentication build API to send OTP via email.	Bhaskara	Ongoing
8	Database Connection API	Implementation of APIs for interaction of application with database.	Yash	Ongoing
9	Hosting application on AWS	Hosting the backend code on cloud as well for integrating and testing with the front-end. Host sample database on cloud and tested the API's.	Shashank	Ongoing
10	Login Authentication	Login page with authentication services at the front end.	Yash	Ongoing
11	Malicious Login	Develop ML based malicious login	Bhaskara	Ongoing
12	Database Testing	Testing the database triggers and foreign keys. Hashed data storage.	Manoja, Anthony	Ongoing
13	Integration Testing	Testing Front-end and backend integration points.	Shashank, Yash	Ongoing

Task Progress

Task Name	Member	Date of Review	Reviewer(s)	Review Conclusion	Recommended Action
Hosting DB on AWS	Manoja and Anthony	Mar 12th	Shashank	Satisfactory	
Web-profile design	Karan	Mar 12th	Yash	Satisfactory	

Issues

1. Due to mid-term exams for many of the team members, progress for the week was reduced considerably during spring break and week 9.
2. Organization of the work due to interdependencies of different components.

Gantt chart

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