CSE 545: Software Security

Secure Hospital System

Group 09 Weekly Report - 02

Person prepared this report: Kiran Shanthappa on 10am 1st Feb 2022

Person approved this report: Yash Bhokare on 12pm 1st Feb 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

[Jan 28th, 2022 – 04:00 pm]

Kiran and Shashank joined meeting through zoom, as they were under quarantine protocol. Rest of the team attended meeting in-person.

[Jan 28th, 2022 – 04:30 pm]

As per the task distribution from week 1, each team member continues to do research on the assigned tasks. Each team member highlighted their progress and analysis of assigned tasks. Highlighted sub-tasks from the requirements that need future research and analysis. To continue the research and analysis this week and assemble each component to construct system architecture design.

[Jan 28th, 2022 – 05:00 pm]

Discussion on SHS architecture and system design are scheduled for an upcoming meeting on Feb 4th, 2022. Expectation set to understand each solution design and point of integration, leading up to preparation of the SHS architecture.

Tasks Summary

Task Number	Task Name	Details of Task	Member	Status
1	Sensitive data encryption	Researching database encryption at rest. Plan to use pgcrypto in the sql queries.	Anthony	Ongoing
2	Database hosting on AWS	Understanding compatibility, and advantages of hosting (various) databases on cloud.	Manoja	Ongoing
3	Database Design	Compiling the inputs from team members for table creation, fields and relationships.	Anthony and Manoja	Ongoing
4	Research on blockchain	Going through the Hyperledger Fabric tutorial. Understanding blockchain for storing various transactions.	Kiran and Jayanth	Ongoing

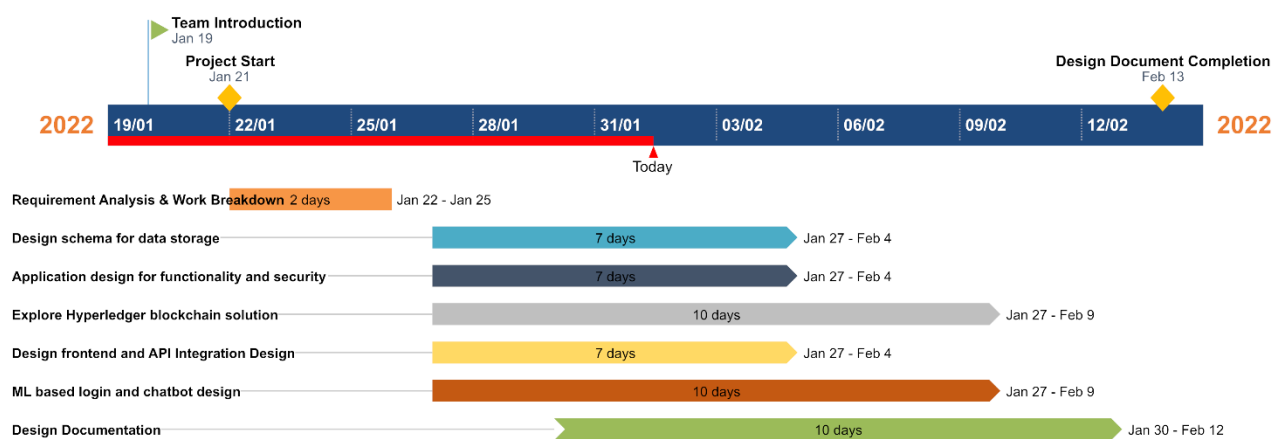| 5	Hyperledger Fabric Integration method	Setup hyperledger fabric instance in local machine to understand the integration method.	Kiran	Ongoing
6	ML for malicious login	Researching - prevention of malicious logins using ML. Working on dumping json files onto AWS to get familiarized with API calls	Shashank	Ongoing
7	Patient web-profile design	Preparing webpages for patient's login and their profile info.	Rajesh and Karan	Ongoing
8	Secure Database on AWS	Understanding to host the whole project on AWS server and the possible ways of how we could secure the database.	Jayanth	Ongoing
9	Wireframes for web pages	login page with auth token. I'm also working on the wireframes for all web pages.	Yash	Ongoing
10	Login auth token	Designing login page auth token.	Yash	Ongoing
11	AWS Account Setup	Setting up an AWS account and sharing its details with the team.	Bhaskara	Ongoing
12	Insurance claim design	Research and design of insurance policies and claims.	Bhaskara	Ongoing

Task Progress

None

Issues

1. Task dependency on each other for integration and system design. Require understanding of each solution component and its integration.
2. Covid quarantines continue to prevent some of the team members from attending the meeting in-person.

Gantt chart

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Week 2 Progress