TalkWorkHere

Course - Managing Software Development

Team 201

Team members

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Product Overview

Our goal was to create a simple and effective chat application.

Users of this application should mainly be able to:

- Retrieve or initiate conversations easily
- Find people
- Create groups and have group conversations.

System Functionality

We have categorized our system in 4 core set of functionalities:

- User functionalities
- Group functionalities
- Messaging functionalities
- 3rd Party (Government) functionalities

User functionalities

What we achieved...

- Registration
- Login (Get queued messages)
- Profile Update
- User searchability
- User follow/unfollow
- Getting online users

Could have achieved...

- Setting icons and personalities in user profiles
- Login using Facebook, Gmail or other accounts

Group functionalities

What we achieved...

User Actions:

- Group creation
- Leaving group
- Inviting users
- Group searchability

Moderator Actions:

- Group settings update
- Group deletion
- Adding users
- Removing users
- Approving invites

Could have achieved...

Password protected groups

Messaging functionalities

What we achieved...

- User to user
- User to group
- Reply to a user message
- Private reply to a group message
- Recall/Delete sent messages
- Get all messages for this user
- Store messages permanently

Could have achieved...

- Ephemeral messages
- Handle Time-zones for recipients
- Forward the messages
- Support for more languages
- Threaded messages

3rd Party functionalities

What we achieved...

- Tap a user
- Get conversational history of the tapped user
- Get updates on user login

Could have achieved...

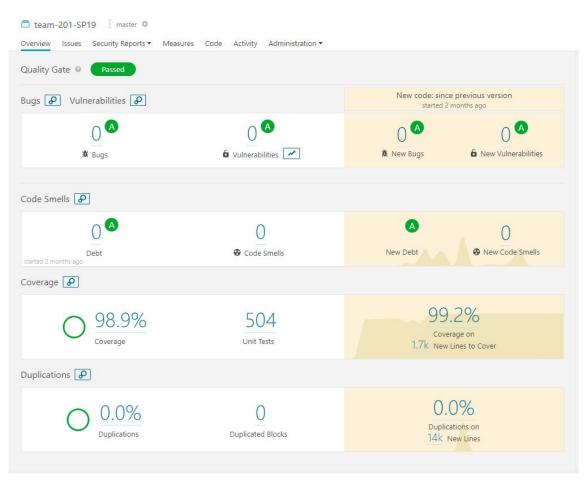
 Sending a copy of ongoing conversations for a tapped user

Product Relevance to client

- This product is designed keeping the users of this application at the core.
- It satisfies all the core requirements as stated in the product backlog
- And thus provides the functionality required by the user
- One of the applications for this product will be:
 - Private communication platform for an enterprise with a few hundred users

Quality considerations

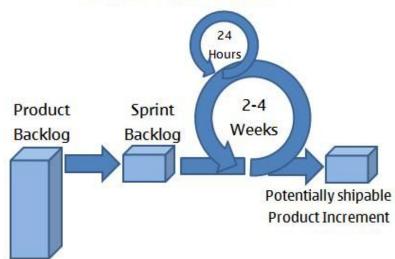
- Javadoc
- SonarLint
- SonarQube
- UX considerations
- Constant feedback from Product Manager (TA)



Sonarqube report for the product code

Process and Teamwork (Scrum)

Scrum Framework



Process and Teamwork

- Together Everyone Achieves More
- Collaborative work
- Daily reviews
- Constant Feedback
- Issue Management Jira

Continuous Integration/Continuous Deployment

- Github
- Jenkins
- SonarQube
- AWS EC2 Server

Challenges/Shortcomings faced

- Understanding and refactoring legacy code
- Parallel Branch to master
- Deployment Issues
- Writing a clean test suite
- Managing project scope
- Managing schedules

Technology Transfer

- Client Handover:
 - Basic functionalities provided
 - README for using the product
 - HELP functionality at chatter
- Developer Handover:
 - Detailed javadoc
 - Detailed README for setting up the project
 - Please refer to the setup video provided in the documentation for further details

Future Work

- A Graphical User Interface
- Language support
- Encrypt the messages while in transit
- Encrypt the database
- Time zones support
- Multimedia
- Parental control

Thank you