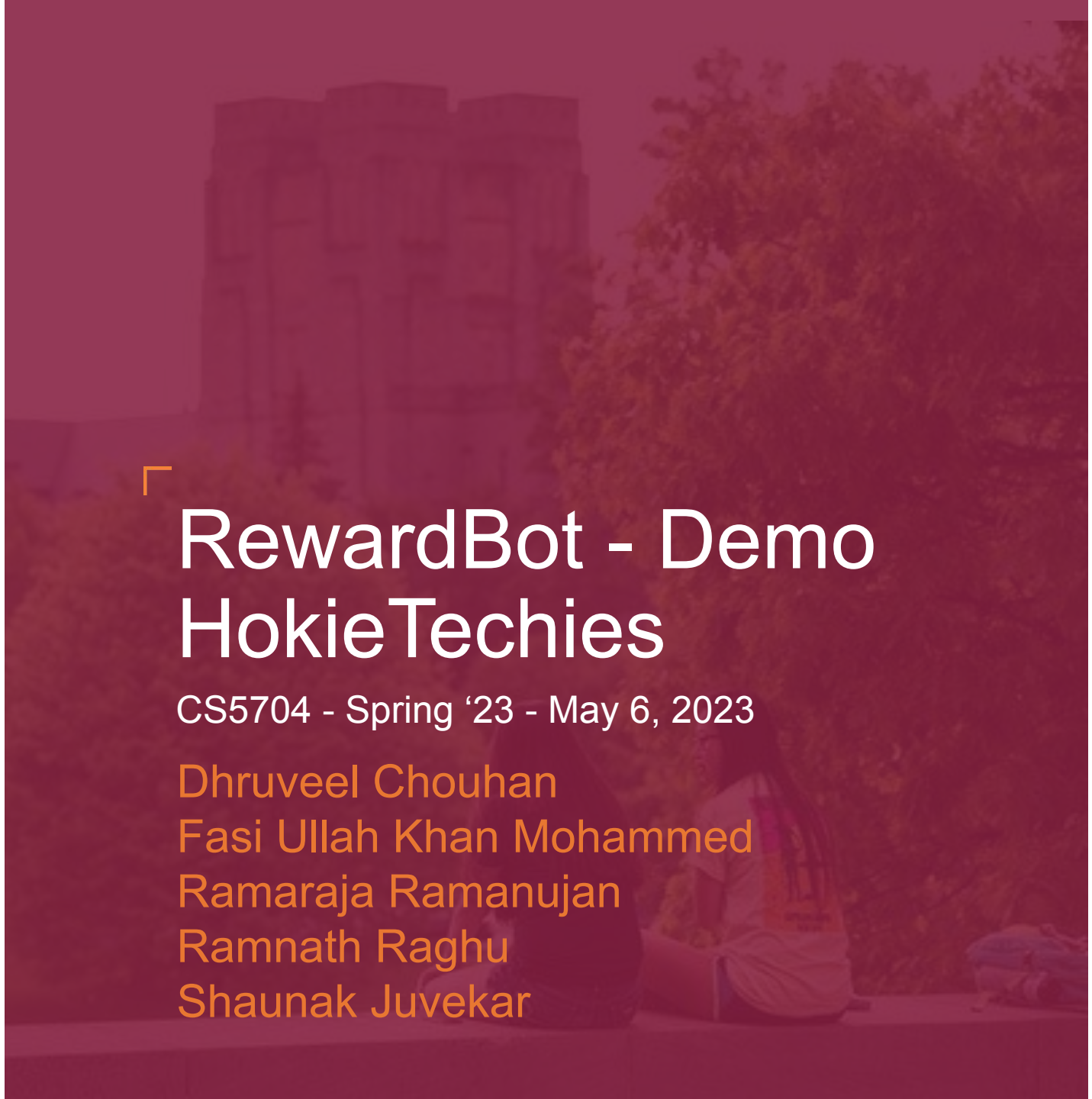


RewardBot - Demo HokieTechies

CS5704 - Spring ‘23 - May 6, 2023

Dhruveel Chouhan
Fasi Ullah Khan Mohammed
Ramaraja Ramanujan
Ramnath Raghu
Shaunak Juvekar

VIRGINIA TECH™

Problem Statement

What?

- Not able to quantify good quality work
- Lack of motivation to do good quality work
- Missing actionable objectives
- Lack of recognition

Motivation?

- "Quiet Quitting" and "The Great Resignation"
- Growing discontent
- Identify top performers
- Foster a healthy work culture

Proposed Solution - RewardBot

Features:

- Slack Bot that provides reward points
- Leaderboard
- External Integration - GitHub

Utility:

- Provides recognition for hard workers
- Provides tangible rewards for good quality work
- Promotes healthy competition which in turn drives up productivity
- Fosters a healthy work culture that keeps people content
- Helps the company identify and retain top performers

Points Reward System

Use Case

Use Case: Manually Awarding Points to Peers

Preconditions:

- The employee must have the necessary authorization to use the RewardBot.
- The employee should not have already used the RewardBot to award points more than two times.

Main Flow:

The employee will input the details of the award such as the recipient's name, the type of award, and the reason for giving the award using the appropriate slash command [S1]. The RewardBot will verify the response and save the points in the database [S2]. The RewardBot will send a private message to the awarder confirming the award details[S3].

Subflows:

[S1] The employee triggers the RewardBot using the appropriate slash command, and the bot will prompt them to input the recipient's name, the type of award, and the reason for the award.

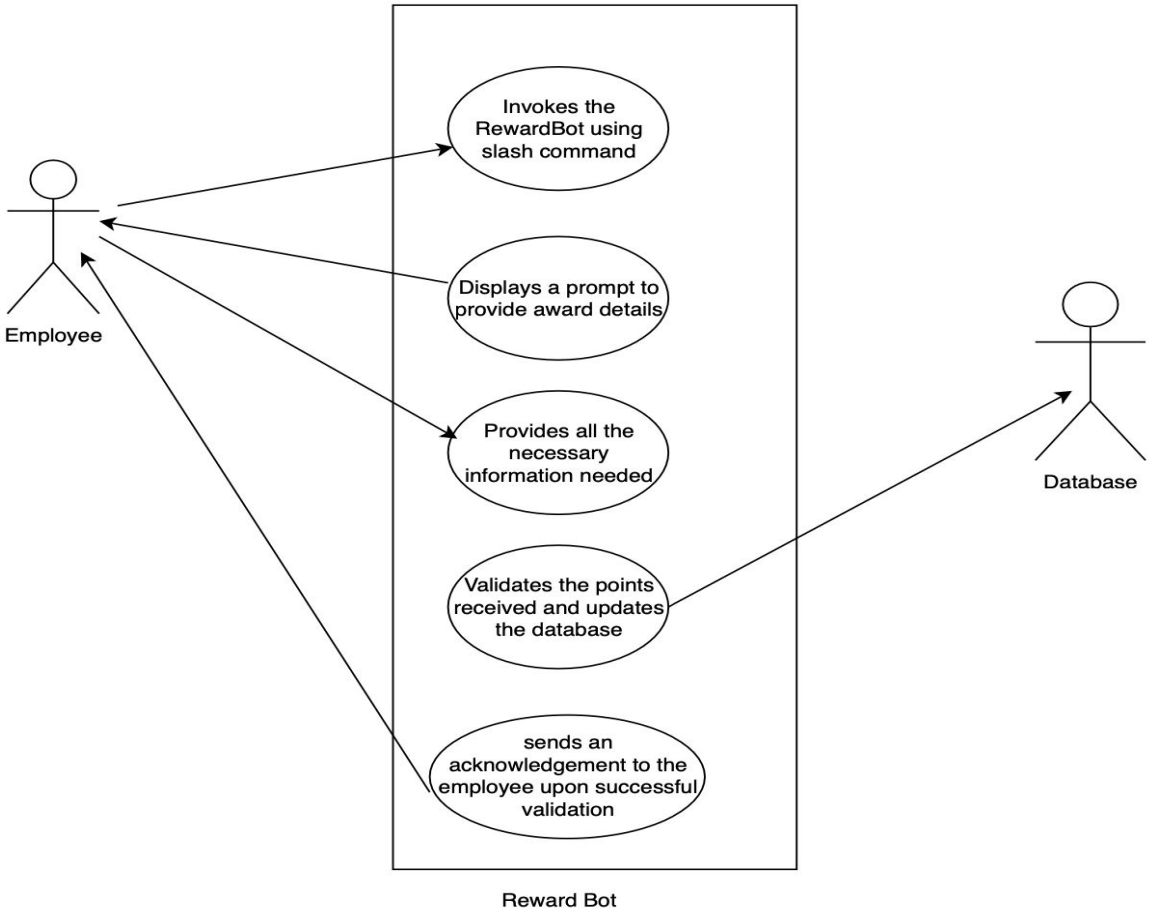
[S2] The RewardBot will validate the response and update the recipient's points if the validation is successful.

[S3] The RewardBot will send a confirmation of the award details to the awarder as a private message.

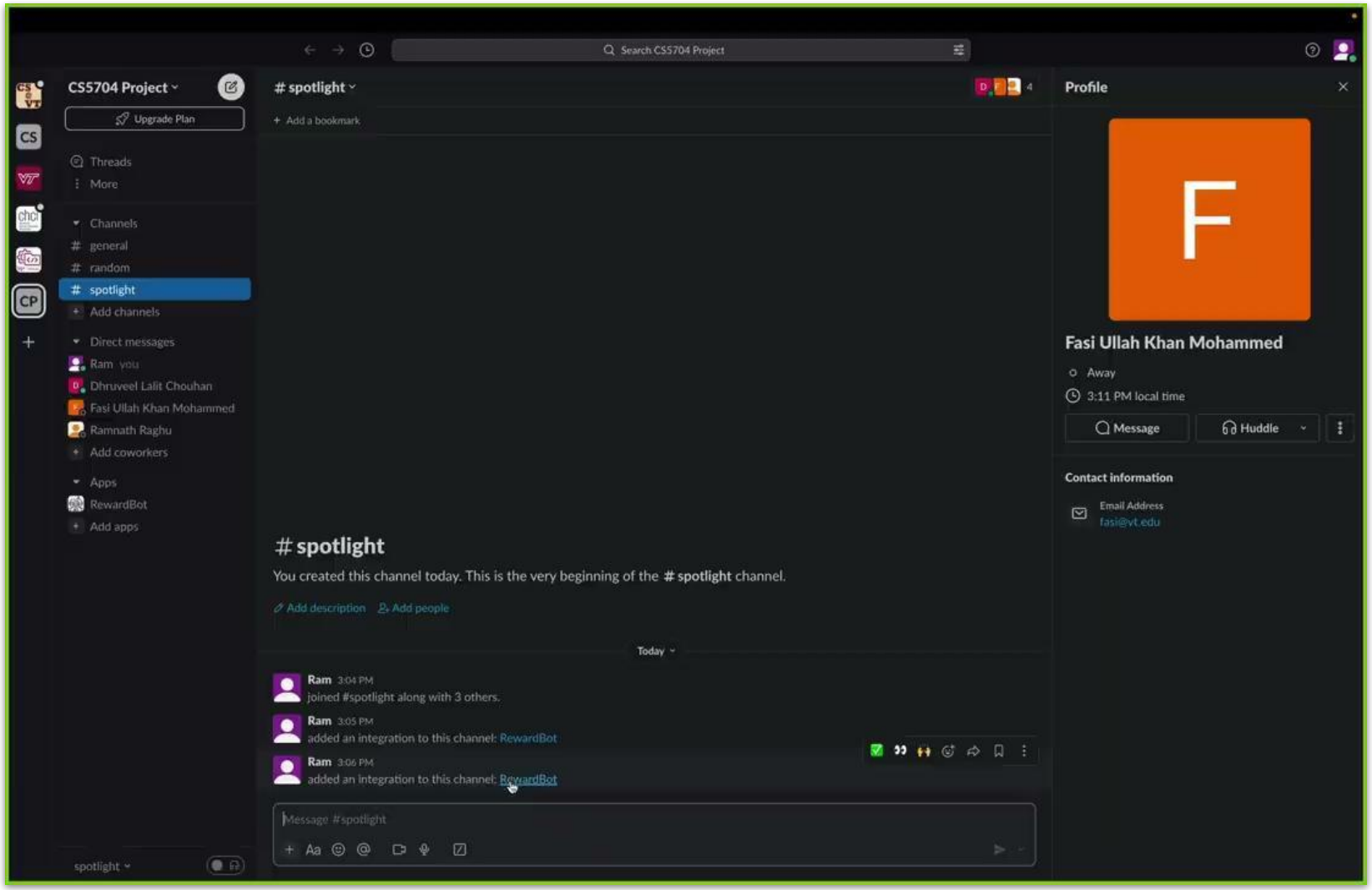
Postconditions:

- The recipient's record is updated with the awarded points.
- The award provider's attempt count increases by one.

User Diagram



Demo


Search CS5704 Project
CS5704 Project
Upgrade Plan
Threads
More
Channels
general
random
spotlight
Add channels
Direct messages
Ram you
Dhruveel Lalit Chouhan
Fasi Ullah Khan Mohammed
Ramnath Raghu
Add coworkers
Apps
RewardBot
Add apps
spotlight
Add a bookmark
spotlight
You created this channel today. This is the very beginning of the # spotlight channel.
Add description
Add people
Today
Ram 3:04 PM
joined #spotlight along with 3 others.
Ram 3:05 PM
added an integration to this channel: RewardBot
Ram 3:06 PM
added an integration to this channel: RewardBot
Message #spotlight
Profile
F
Fasi Ullah Khan Mohammed
Away
3:11 PM local time
Message
Huddle
Contact information
Email Address
fasi@vt.edu

Leaderboard

Use Case

Use Case: Display the leaderboard with the employee's name and their accumulated points.

Preconditions:

1. The employee should have the necessary permissions to interact with the bot.
2. There should be valid entries in the database of the respective employees and their details.

Main Flow:

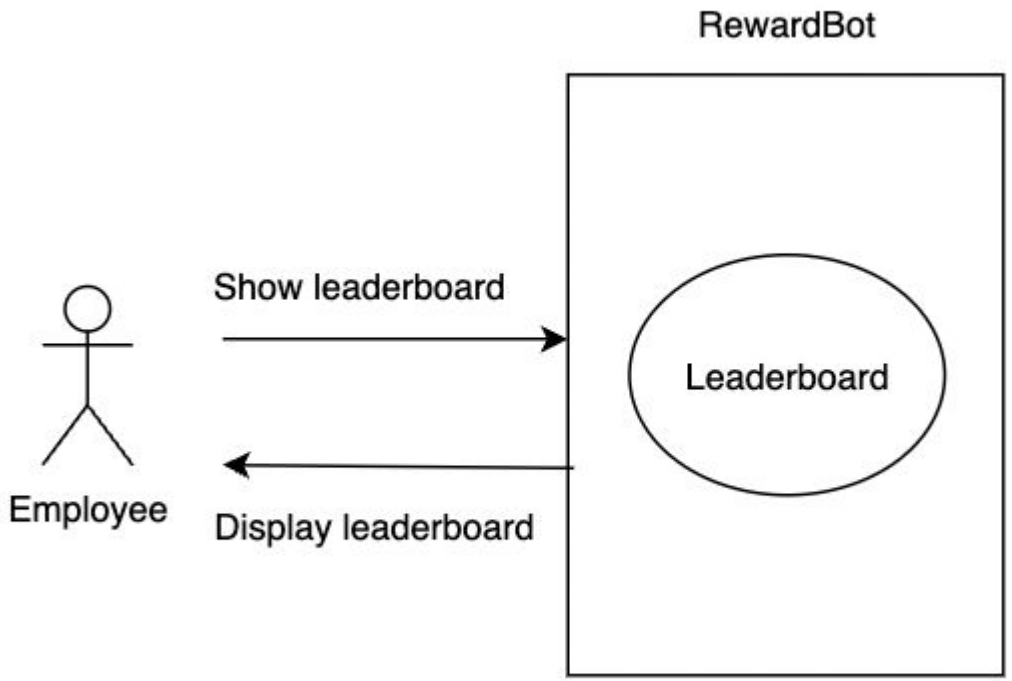
The employee will invoke a slash command which till then trigger the Reward Bot [S1]. The Reward Bot will then show the leaderboard to the employee on a private channel [S2].

Sub Flow:

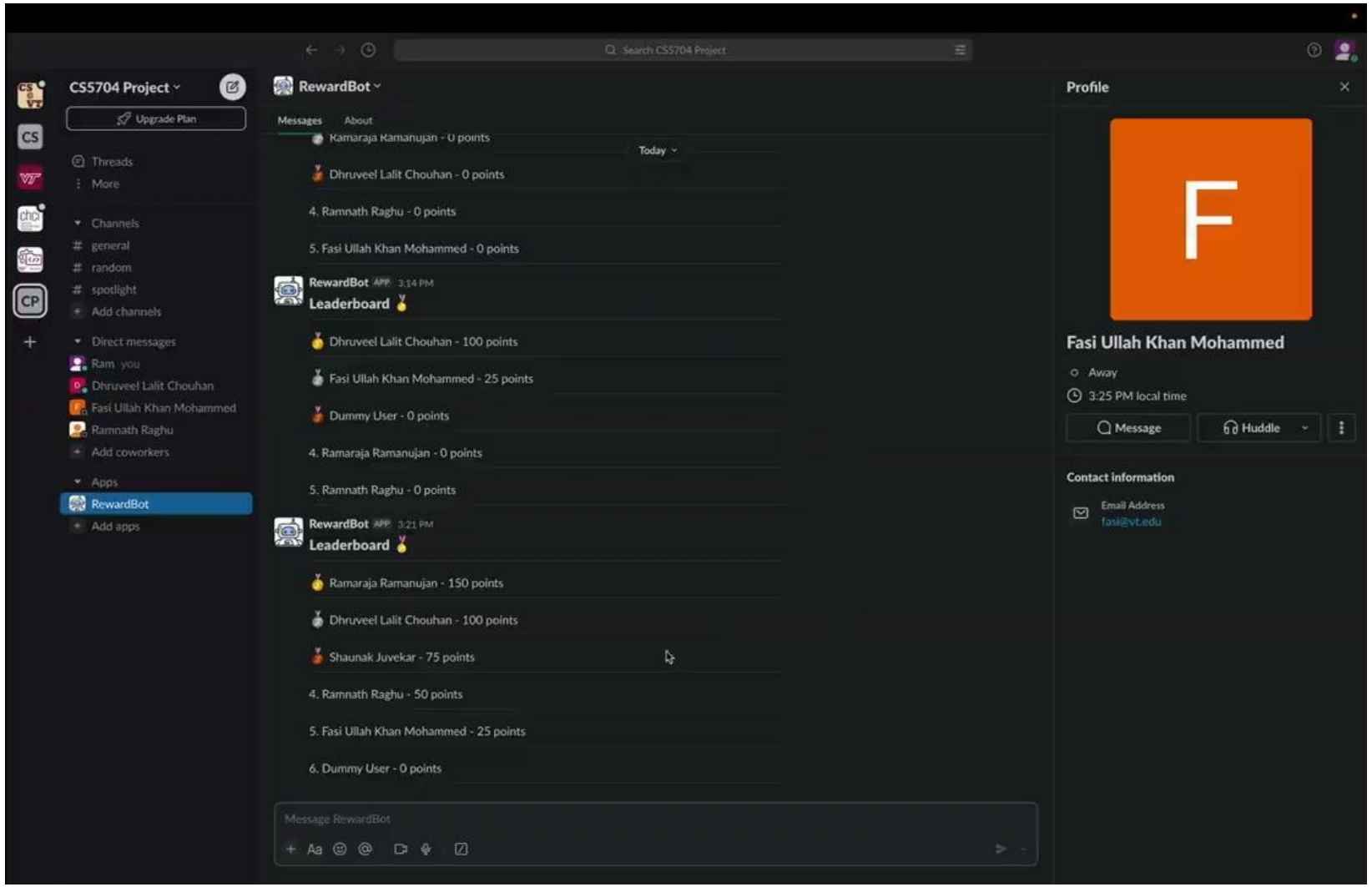
[S1] Employee invokes the bot using the appropriate slash command.

[S2] The bot then sends a private message containing the leaderboard to the employee who invoked the command.

User Diagram



Demo


CS5704 Project
Upgrade Plan
Threads
More
Channels
general
random
spotlight
Add channels
Direct messages
Ram you
Dhruveel Lalit Chouhan
Fasi Ullah Khan Mohammed
Ramnath Raghu
Add coworkers
Apps
RewardBot
Add apps
RewardBot
Messages
About
Today
Dhruveel Lalit Chouhan - 0 points
4. Ramnath Raghu - 0 points
5. Fasi Ullah Khan Mohammed - 0 points
RewardBot APP 3:14 PM
Leaderboard
Dhruveel Lalit Chouhan - 100 points
Fasi Ullah Khan Mohammed - 25 points
Dummy User - 0 points
4. Ramaraja Ramanujan - 0 points
5. Ramnath Raghu - 0 points
RewardBot APP 3:21 PM
Leaderboard
Ramaraja Ramanujan - 150 points
Dhruveel Lalit Chouhan - 100 points
Shaunak Juvekar - 75 points
4. Ramnath Raghu - 50 points
5. Fasi Ullah Khan Mohammed - 25 points
6. Dummy User - 0 points
Message RewardBot
Profile
F
Fasi Ullah Khan Mohammed
Away
3:25 PM local time
Message
Huddle
Contact information
Email Address
fasi@vt.edu

External Integration - GitHub

Use Case

Use Case: Integrating our RewardBot with GitHub

Preconditions:

1. The employee should be present in the database.
2. The employee should have raised a PR.

Main Flow:

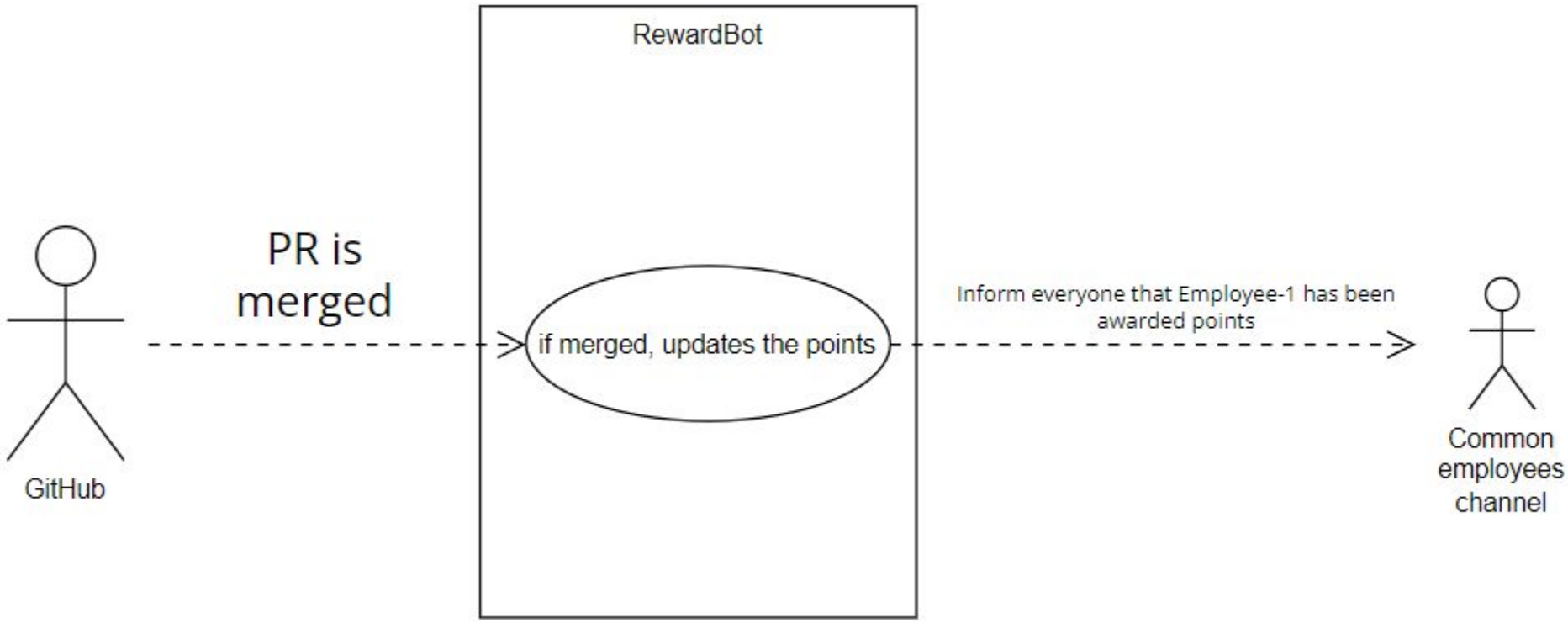
The bot will award the points to the employee who raised the PR once it is merged[S1]. The bot will also post a message on the common channel and will inform everyone about awarding the points[S2].

Subflows::

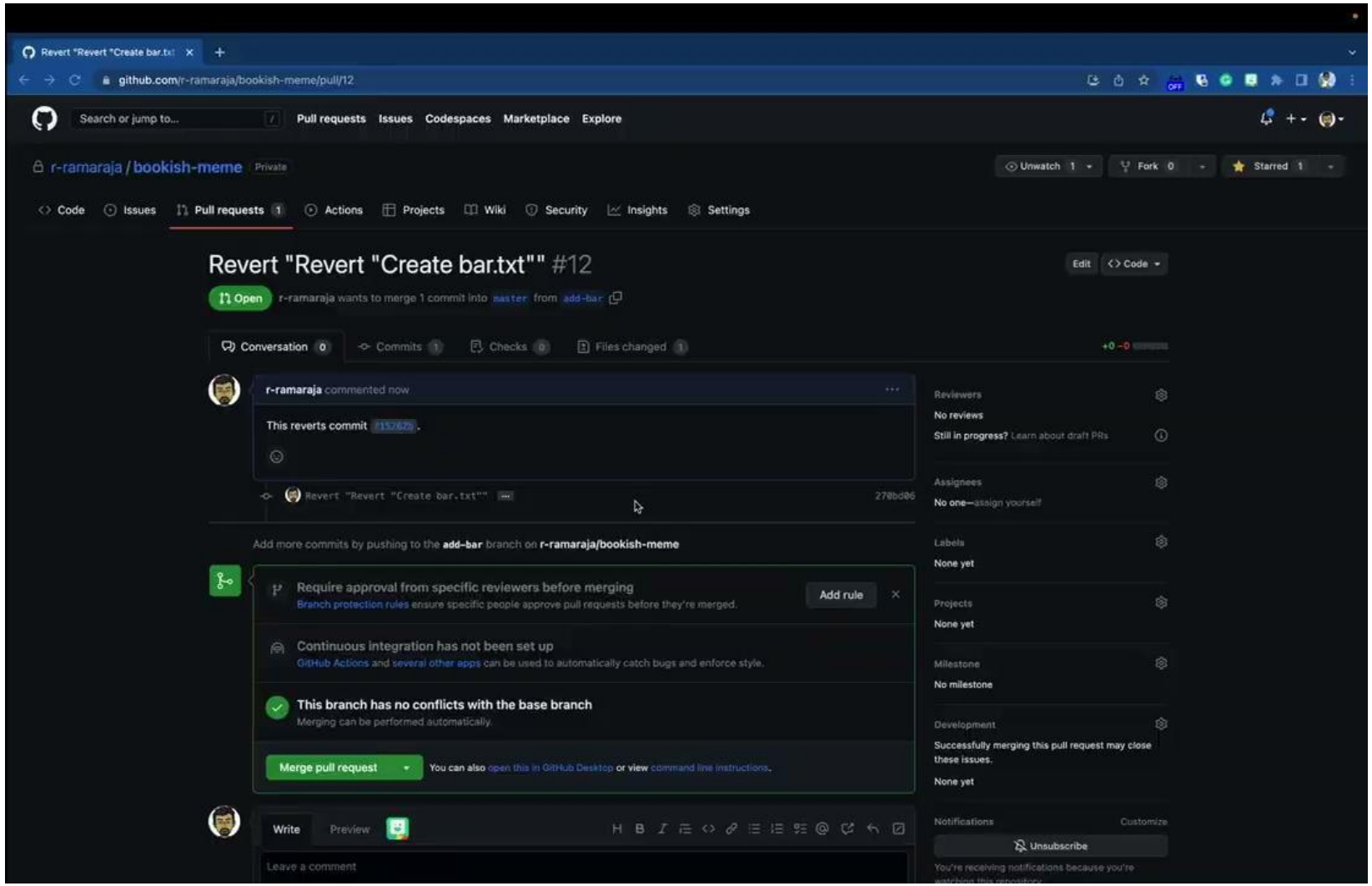
[S1] Once the PR is merged, it automatically award points to the employee and will update the database

[S2] It will post a message on the slack channel saying, Employee ABC has been awarded xyz points for their so and so contribution.

User Diagram



Demo


Revert "Revert "Create bar.txt" #12
Open
r-ramaraja wants to merge 1 commit into master from add-bar
Conversation 0
Commits 1
Checks 0
Files changed 1
r-ramaraja commented now
This reverts commit 115762b.
Revert "Revert "Create bar.txt""
270bd06
Add more commits by pushing to the add-bar branch on r-ramaraja/bookish-meme
Require approval from specific reviewers before merging
Branch protection rules ensure specific people approve pull requests before they're merged.
Add rule
Continuous integration has not been set up
GitHub Actions and several other apps can be used to automatically catch bugs and enforce style.
This branch has no conflicts with the base branch
Merging can be performed automatically.
Merge pull request
You can also open this in GitHub Desktop or view command line instructions.
Write
Preview
Leave a comment
Reviewers
No reviews
Still in progress? Learn about draft PRs
Assignees
No one—assign yourself
Labels
None yet
Projects
None yet
Milestone
No milestone
Development
Successfully merging this pull request may close these issues.
None yet
Notifications
Customize
Unsubscribe

Limitations

- Available only on Slack
- Only one external integration i.e. Github
- As effective as the frequency of the user interactions
- Lack of user study

Future Work

- Further external integrations such as JIRA, Salesforce, StackOverflow, etc.
- Improve gamification - adding levels and badges
- Rules - manager approves the peer-to-peer rewards
- Leaderboard 2.0 - metrics and visualizations
- Customizability - to tailor according to the organization’s culture
- Points Redemption - exchange points for rewards

Lesson Learnt

What went well?

- Develop an app end-to-end from scratch
- Collaboration as a team
- Usage of tools for Software Engineering

What did not go well?

- Time management
- Learning curve
- Cloud deployment

Thank You!
Questions?