



Course – CSCI 5308 (Advance Topics in Software Development)

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“SCRUM ACERS”

Scrum Acers is a platform that is developed to increase the development productivity by making the scrum time more productive by letting the peers know about the updates and blockers beforehand. Also, this platform is developed to avoid unnecessary long calls/meetings so that team members can focus more on getting the work done.

Project Objectives

- Increase Dev productivity by decreasing time spent on project management tasks
- Mitigate Daily Stand-up meetings
- Provide a platform for team members to vote/provide feedback for current and future scrums anonymously
- Provide a platform for company-wide / project-wide announcements
- Recognize efficient teamwork and great intra-team collaborations by giving out badges to well-deserving employees

Project Features:-

- 1) Login for each employee
- 2) Daily Scrum Forms
- 3) Leave Management
- 4) Badging
- 5) Announcement
- 6) Survey
- 7) Notification
- 8) Hours Tracking
- 9) Profile Creation of each Employee
- 10) User Profile
- 11) User Password Management

Feature 1: Log in for Each Employee

It is the first page, where the user gets the option to login into their account.

- We have taken care of all the validations and users will be able to login only with the correct credentials.
- We have also incorporated the forgot password functionality
- The password is stored in encrypted form in the database using bcrypt

A screenshot of a database result grid titled "Result Grid". The grid has columns: emp_id, first_name, last_name, email, and password. The password column contains highly encrypted values starting with "\$2b\$10\$". The rows list employees from 1 to 7 with their respective names and email addresses.

	emp_id	first_name	last_name	email	password
▶	1	Sam	Rogers	samrogers@gmail.com	\$2b\$10\$pyGd8rQV12OM6XeTGsdEWuqRI/Izcr
	2	Elon	Musk	elonmusk@gmail.com	\$2b\$10\$eLD9pL1uHGzyve0etI4uJetCqguM1Er
	3	Jack	Ryan	jackryan@gmail.com	\$2b\$10\$EYIJmg2BMPCOEnM4mL30zeN6Qb4/F
	4	Robert	Yen	robertyen@gmail.com	\$2b\$10\$5WdFoandWjfZ4pEeKAhEqOeUML3BJ
	5	Brian	Rogers	brianrogers@gmail.com	\$2b\$10\$ArbirY/hCMoaeK2e2OUvqOlynLXhwiHt
	7	Emma	Bryan	emmabryan@gmail.com	\$2b\$10\$s0HhZ7ezcgvEB0C0UGJD.BQnOLTbR

Figure 1: Screenshot of encrypted password in database

A screenshot of a web browser displaying the "SCRUM-ACERS" login page. The URL is "scrum-acers-frontend.herokuapp.com". The page title is "Manage your daily scrum activities here!". It features a "Login Here!" button, input fields for "Email" and "Password", a "FORGOT PASSWORD?" link, and a "SUBMIT" button. The background has a blue-to-white gradient.

Figure 2: Screenshot of Login Page of Scrum Acers

A screenshot of the "SCRUM-ACERS" login page showing an error message. The user has entered "guryashgmail" into the Email field. A yellow warning box appears above the input field with the text: "Please include an '@' in the email address. 'guryashgmail' is missing an '@'". The rest of the page is identical to Figure 2.

Figure 3: Login Page Email Validation

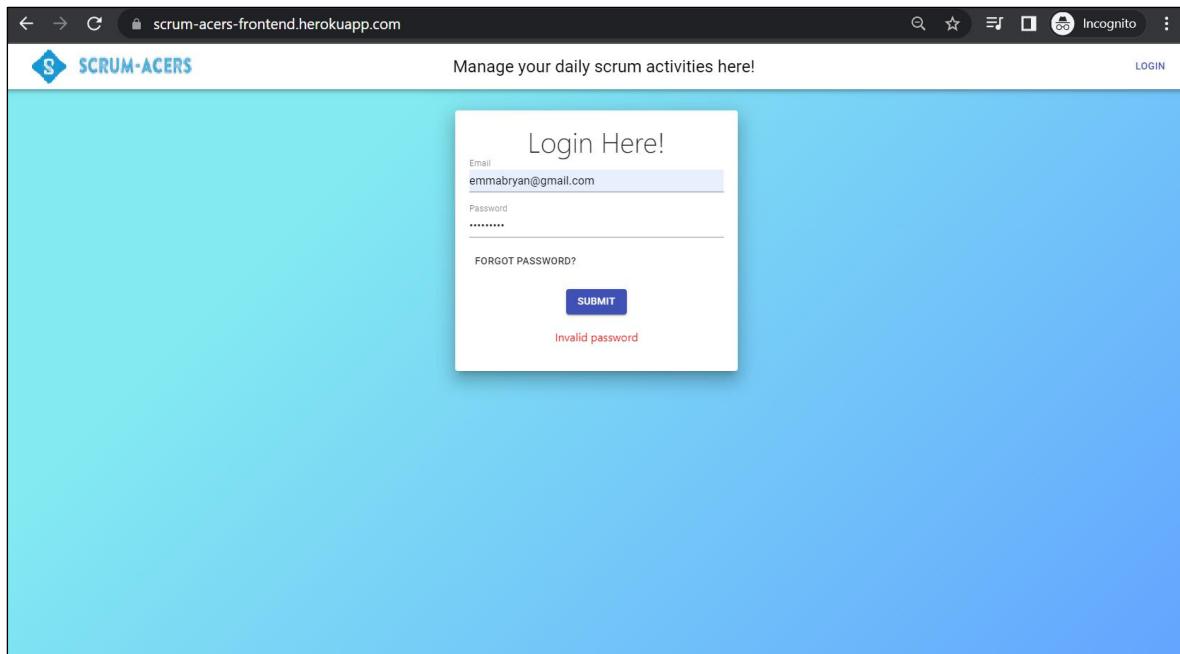


Figure 4: Invalid Password Validation

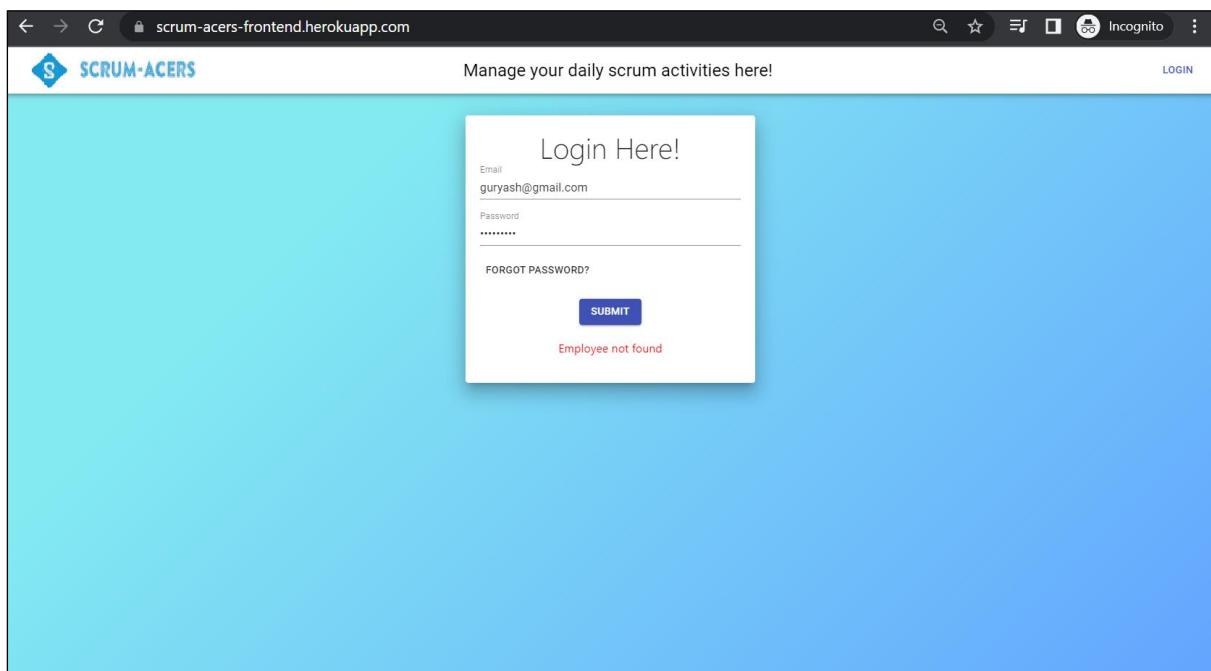


Figure 5: Validation if Employee does not exist

Feature 2:- Daily Scrum form

The employees need to fill a stand up form daily so that the updates are floated within the team. Also, it reduces the need of daily stand up meetings.

- Each employee needs to fill the daily stand-up form which consists of the following questions
 - Yesterday's Goals
 - Today's Goals

- Challenges Faced
- Blockers if any
- Employee can fill up the stand-up form only once in a day, if the person tries to fill the form again then it will display “Your form has been submitted”
- Team Lead would be able to view the form filled by all team members
- If an employee adds a blocker , a notification would be sent to all team members

The screenshot shows the 'Daily Stand-Up Form' page. At the top, there are three text input fields: 'Please put Yesterday's Goals achieved' (containing 'Completed the hours tracking module yesterday'), 'Please put Today's Goals' (containing 'We will remove the smells detected using sonargube and will complete the refactoring'), and 'Please put Challenges Faced' (containing 'The logic formation in hours tracking took significant amount of time'). Below these fields is a horizontal slider labeled 'Number of Blockers' with a value of 1. At the bottom of the form are two buttons: 'SUBMIT' and 'RESET'.

Figure 6 : Daily Stand Up Form Page

The screenshot shows the 'Daily Stand-Up Form' page after it has been filled. The three input fields now contain the entries from Figure 6. The horizontal slider labeled 'Number of Blockers' has a value of 1. At the bottom of the form are two buttons: 'SUBMIT' and 'RESET'.

Figure 7 : Daily Stand Up Form after it is filled by an employee

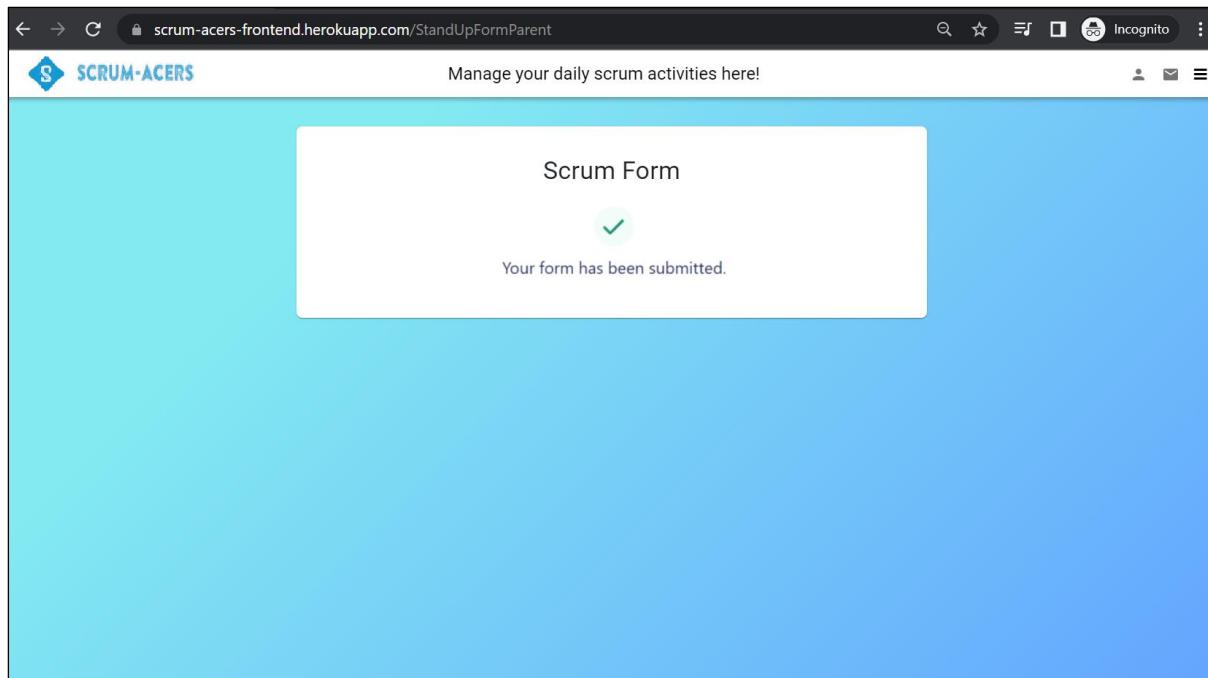


Figure 8: After Scrum Form is submitted by an employee

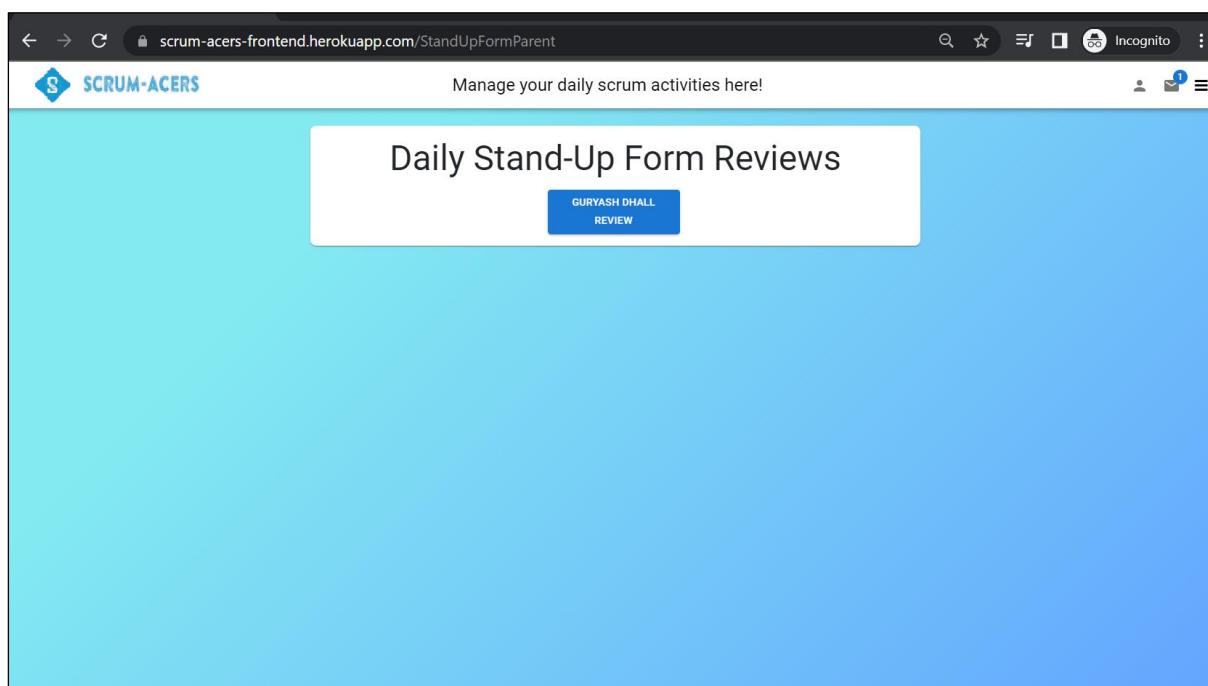


Figure 9 : Manager View for stand up form

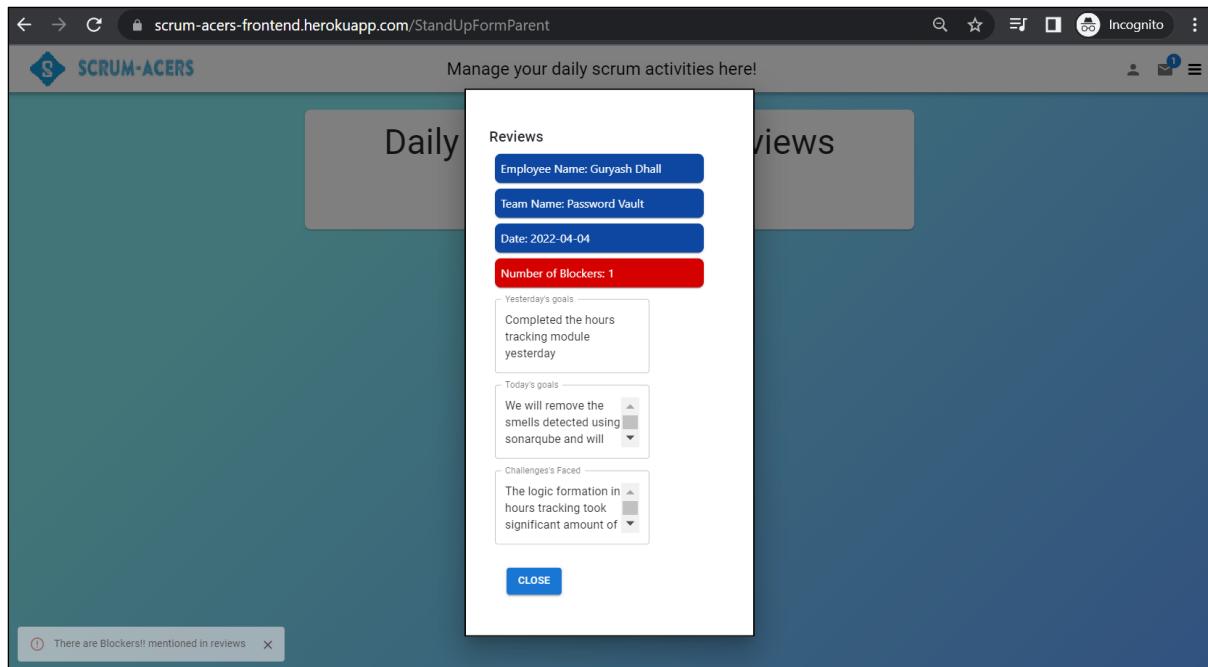


Figure 10 : Manager View for stand up form

Feature 3 : Leave Management Module

This feature aids all the employees to apply for a leave and manager of that employee can approve or reject the leaves.

- The Employees can apply for a leave in the ‘Raise Leave Request’ tab on load of which the employee’s manager details are fetched
- The Employee can view the leaves raised and it’s status in the ‘View Raised Requests’ tab
- Manager has an option to view the leaves raised by the team members
- If the manager accepts the leave request, leaves are debited from the employee’s account

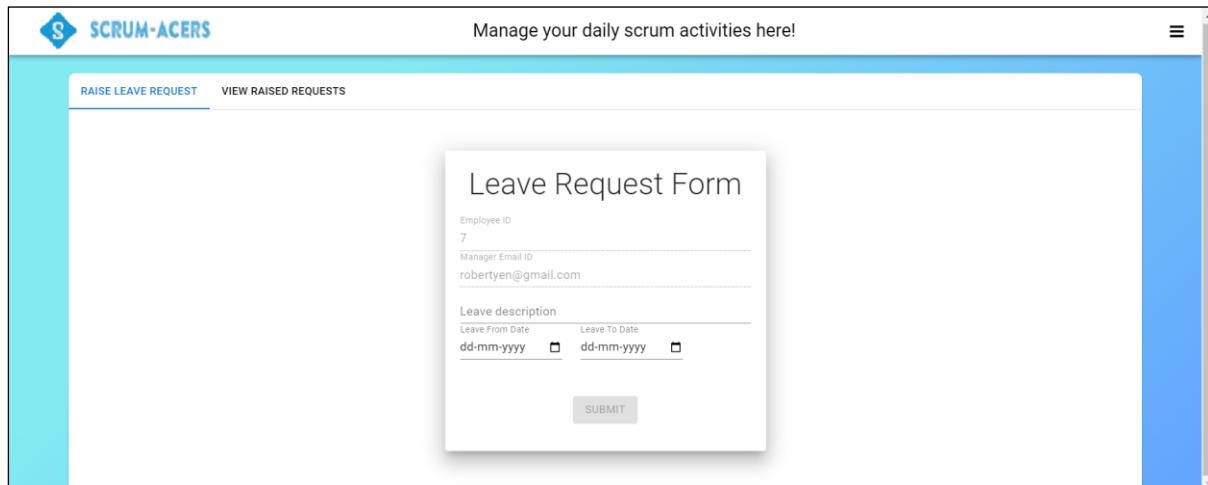


Figure 11: Leave Request Form for Employees

The screenshot shows a web browser window with the URL `scrum-acers-frontend.herokuapp.com/Leaves`. The page title is "SCRUM-ACERS" and the subtitle is "Manage your daily scrum activities here!". Below this, there are two buttons: "RAISE LEAVE REQUEST" (highlighted with a blue underline) and "VIEW RAISED REQUESTS". A modal window titled "Leave Request Form" is displayed. Inside the modal, the following fields are visible:

- Employee ID: 30
- Manager Email ID: sophiabridget@gmail.com
- Leave description: Going to attend Parvish marriage
- Leave From Date: 19-04-2022
- Leave To Date: 22-04-2022

A blue "SUBMIT" button is located at the bottom right of the modal.

Figure 12: Leave Request Form after it is filled by an Employee

The screenshot shows the same web browser window as Figure 12. The "RAISE LEAVE REQUEST" button is still highlighted with a blue underline. The modal window now displays the same form fields as Figure 12, but includes a green success message at the bottom: "Leave Request Raised Successfully".

Below the modal, a small green notification bar appears with a checkmark icon, the text "Leave Request Raised", and a close button (X).

Figure 13: Leave Request after raising the request

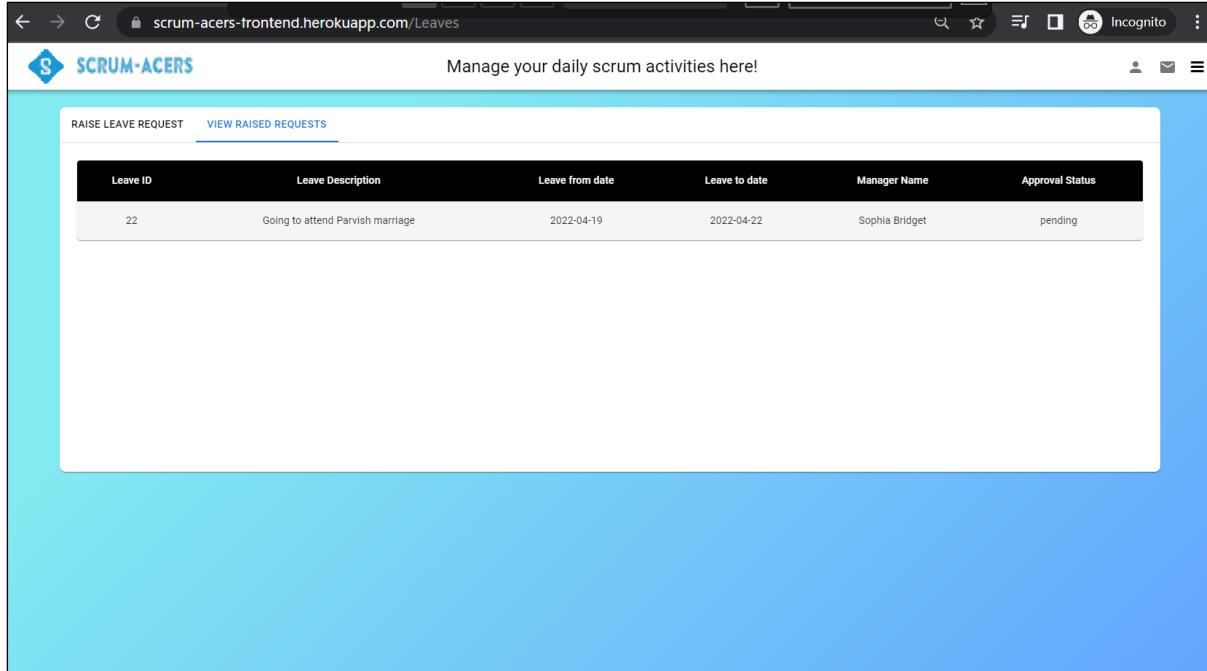


Figure 14: View Raised Requests Tab for Employee

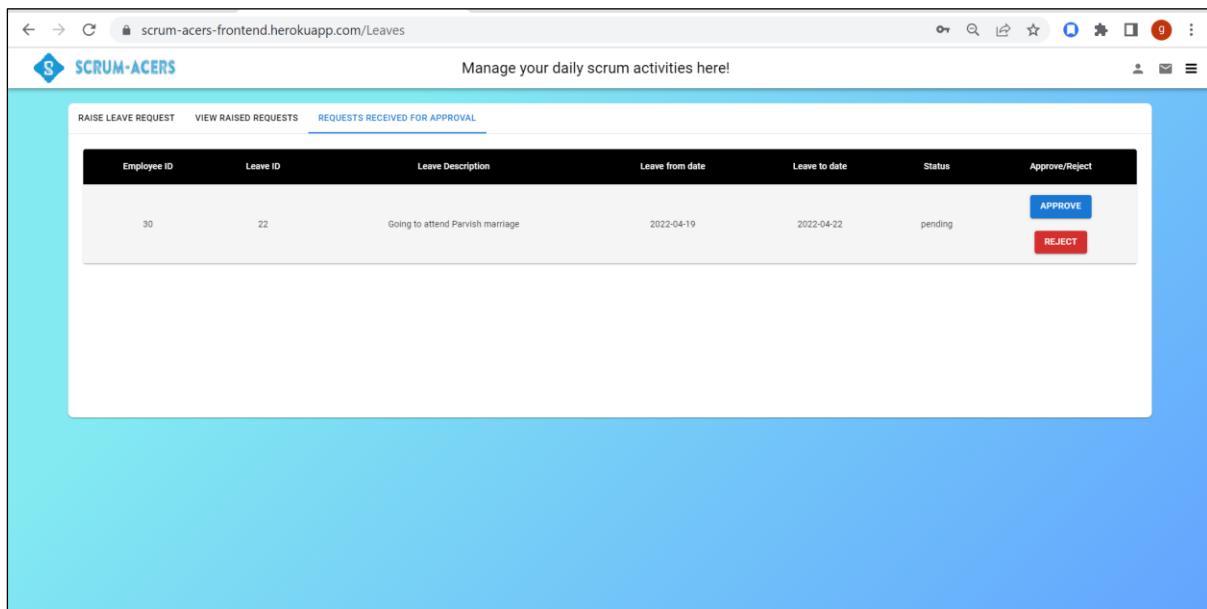


Figure 15: Manager's View for the Leave Request's Received

Feature 4 : Badging

This feature is designed for appreciating individual efforts and motivate the employees.

- Manager and Team Lead have the option to provide the badges to the employees
- The badges are displayed on the profile page of each employees
- Manager can add/update the badges provided to the employees

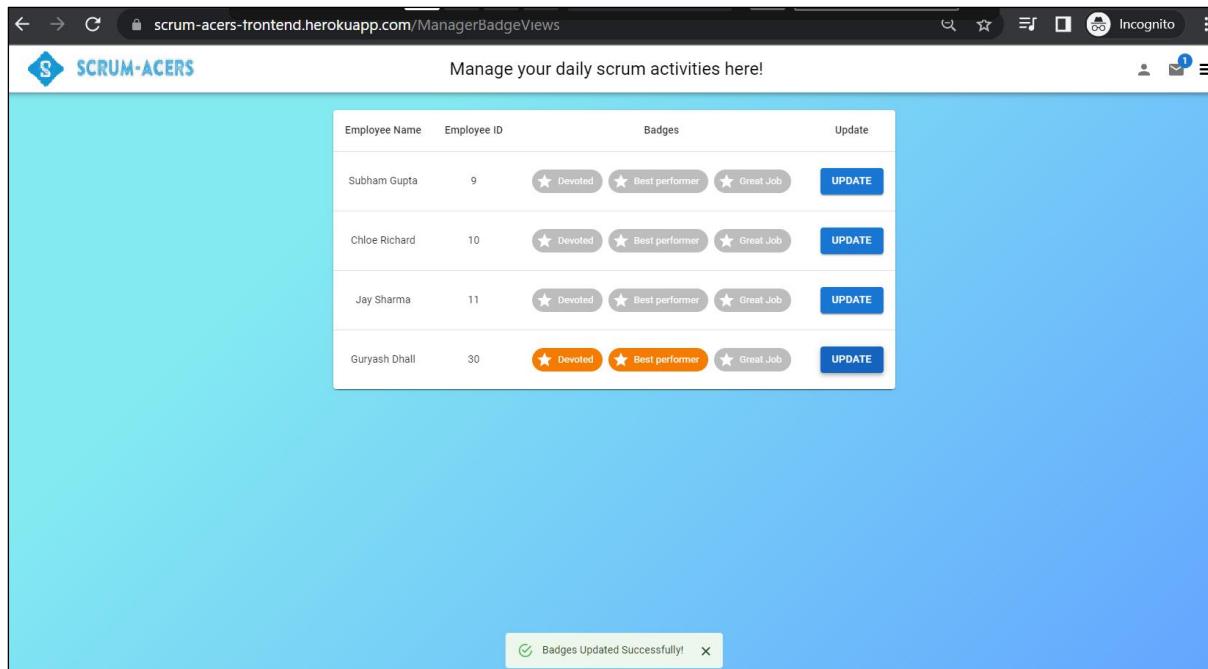


Figure 16: Manager's View after updating the employee badges

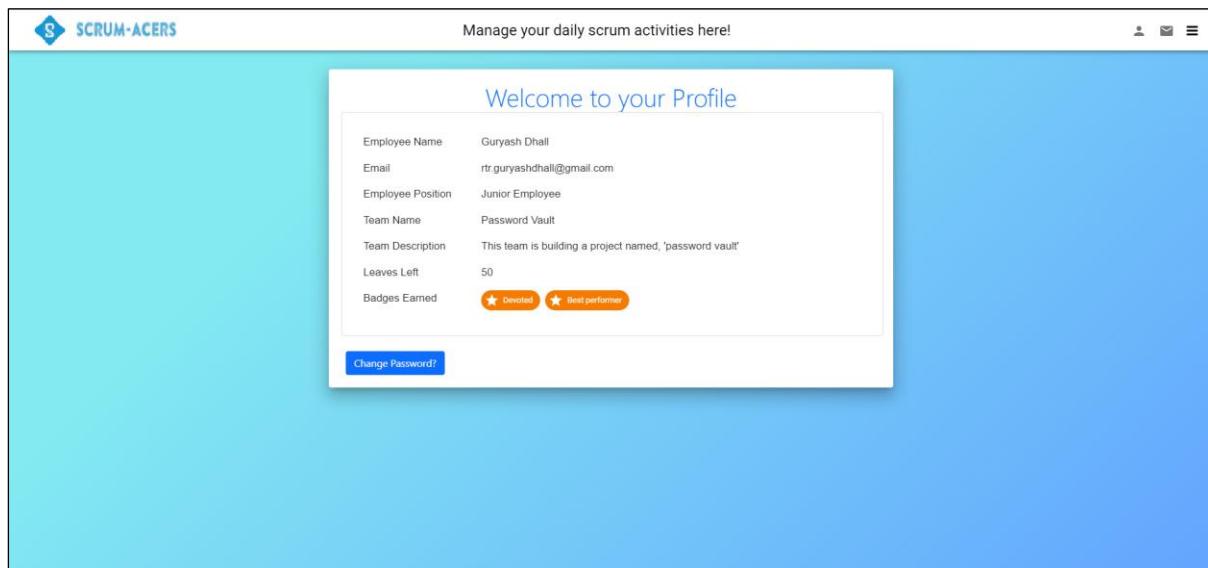


Figure 17: Badges updated in the profile

Feature 5 : Announcement

This is for the general announcements and updates within the organization

- This page would be visible to all the employees
- Employee level less than 5 (Manager's and above) only have the option of creating an announcement
- The manager who has created the announcement has the option to delete it

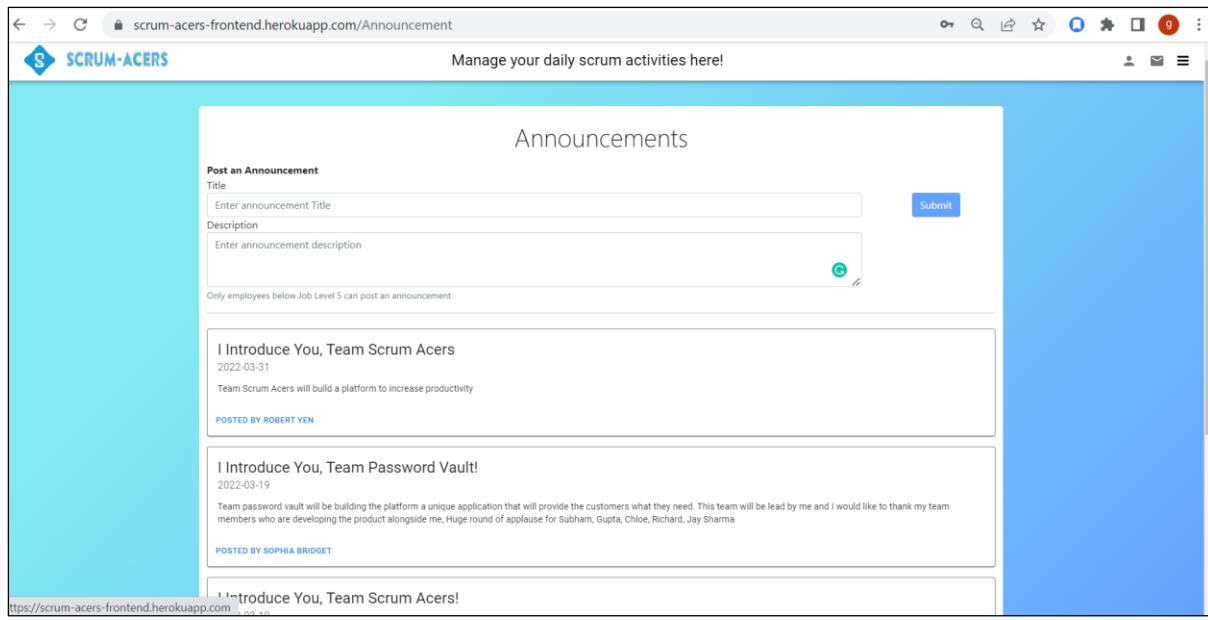


Figure 18: Announcement Page View for Employees

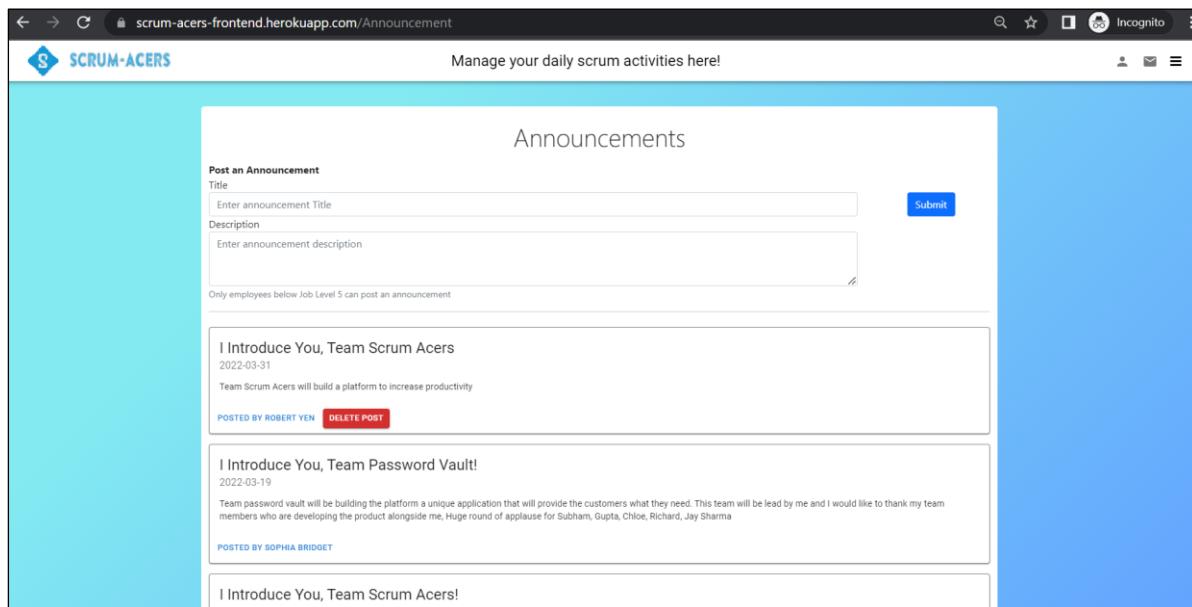


Figure 19: Announcement Page View for Manager (Manager can add/delete announcement)

Feature 6 : Survey

This is designed to take informal weekly survey from the employees on how the team is performing and hence appropriate actions can be taken from the response of the survey

- Manger/Team Lead has the option of creating a survey
- The survey form can have total 3 questions
- The validity of each survey is one week
- The employees within the team will have the option to fill up the survey
- Manager will be able to see the list of employees who have filed the survey
- Manager will be able to see the responses which are filled by employees

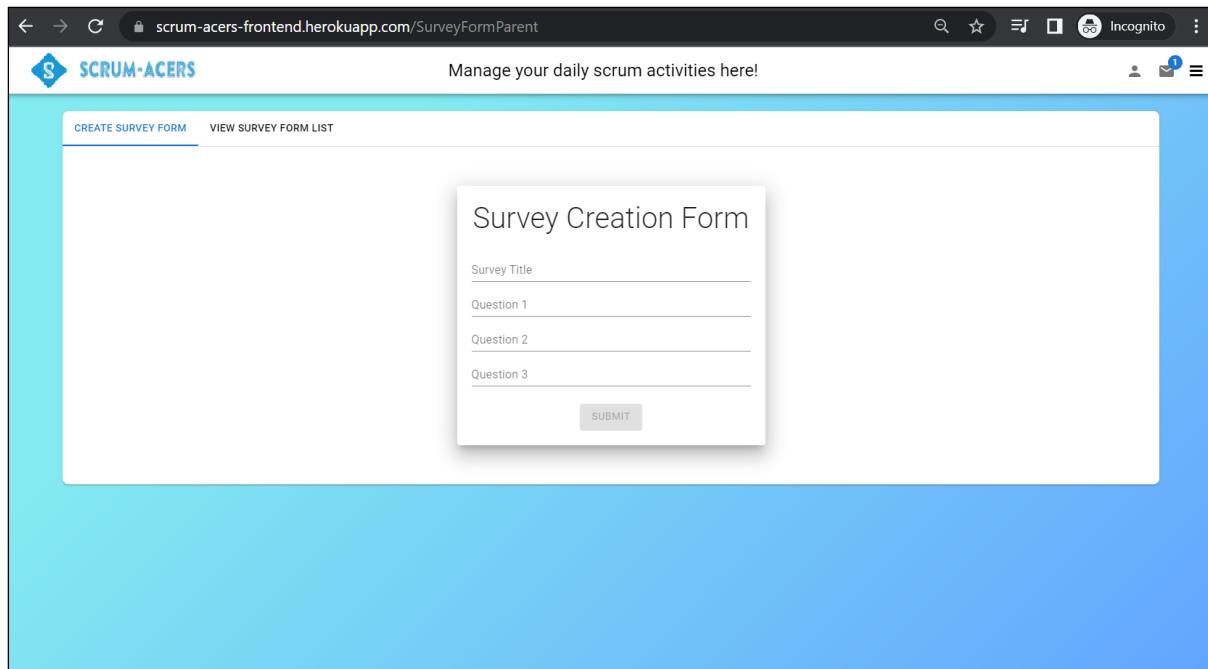


Figure 20: Survey Creation Form (from Manager's View)

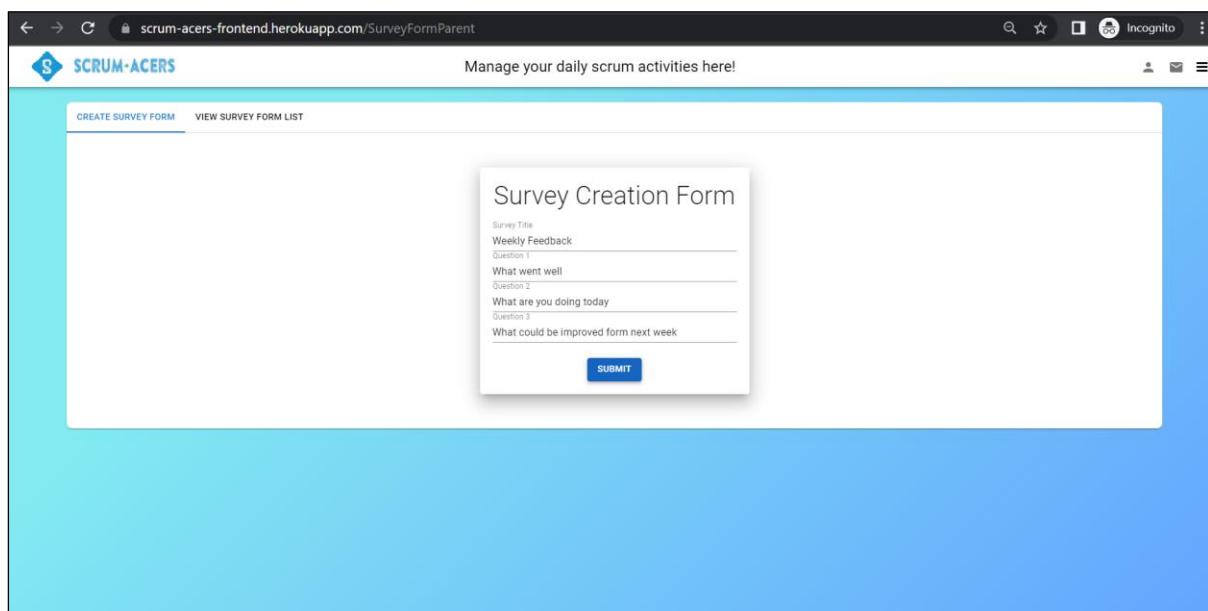


Figure 21: Survey Filled by Manager

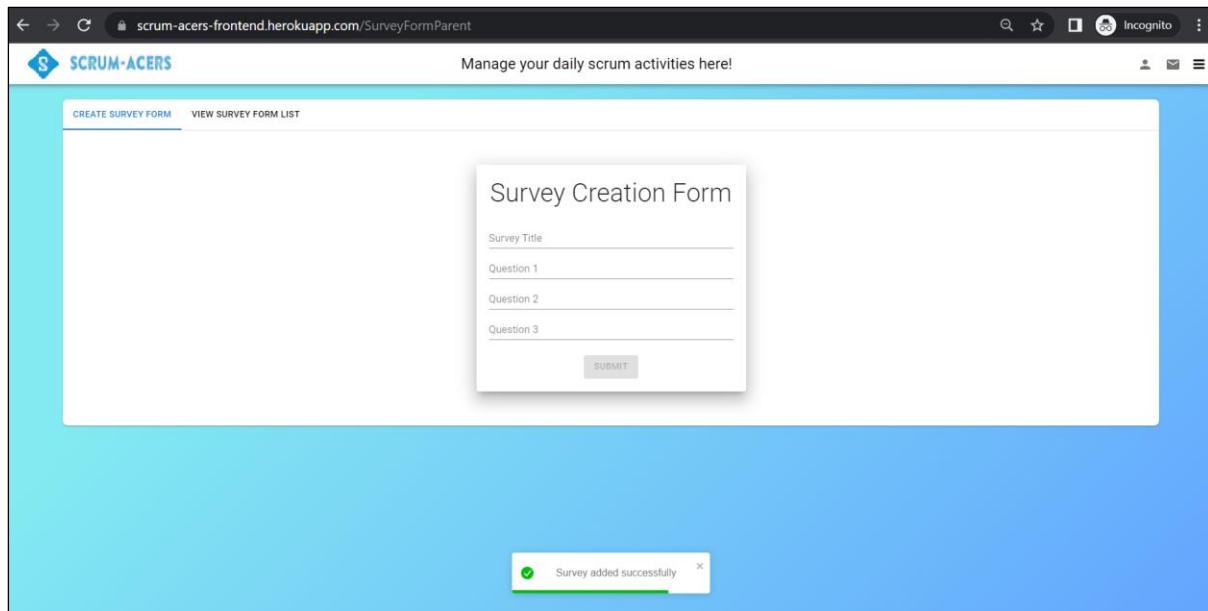


Figure 22: Survey form submitted successfully by Manager

A screenshot of a web browser showing a list of survey responses. The URL is 'scrum-acers-frontend.herokuapp.com/SurveyFormParent'. The page displays four survey entries in a grid format. 1. 'New Acer' (Date Posted: 2022-04-02) with questions: 'What went well?', 'What you liked this week?', 'What are u doing today?'. 2. 'Form testing' (Date Posted: 2022-04-04) with questions: 'test', 'testing', 'testing this'. 3. 'Form' (Date Posted: 2022-04-05) with questions: 'Form', 'Form', 'Form'. 4. 'Weekly Feedback' (Date Posted: 2022-04-05) with questions: 'What went well', 'What are you doing today', 'What could be improved form next week'. Each entry has a 'VIEW RESPONSES' button below it.

Figure 23: Survey responses as viewed by Manager

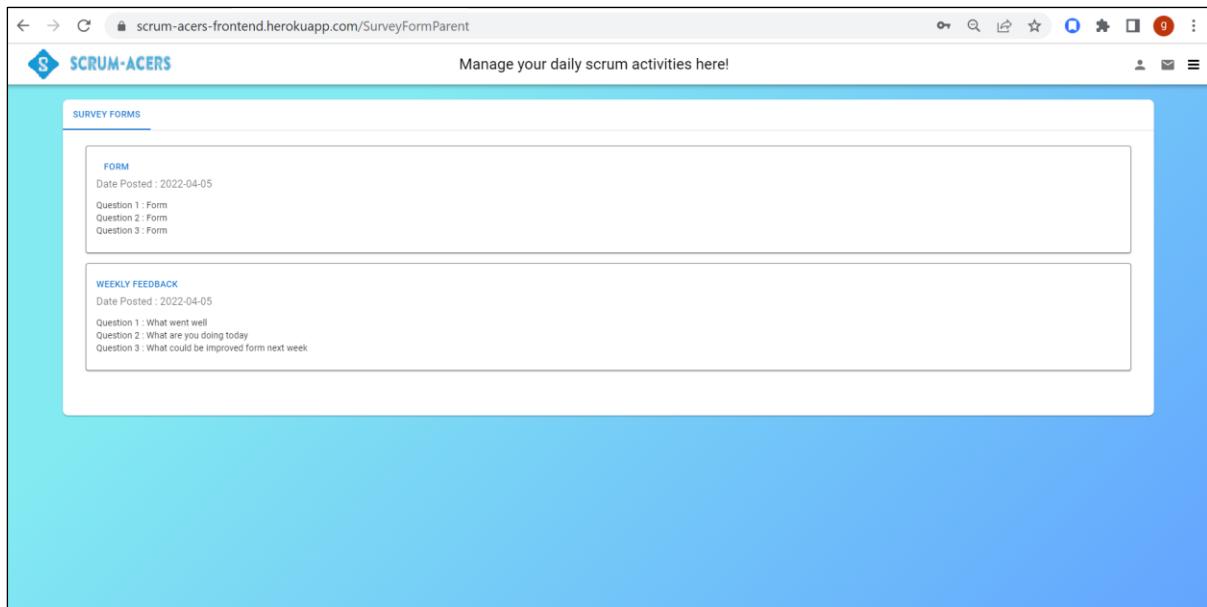


Figure 24: Survey form as viewed by employee

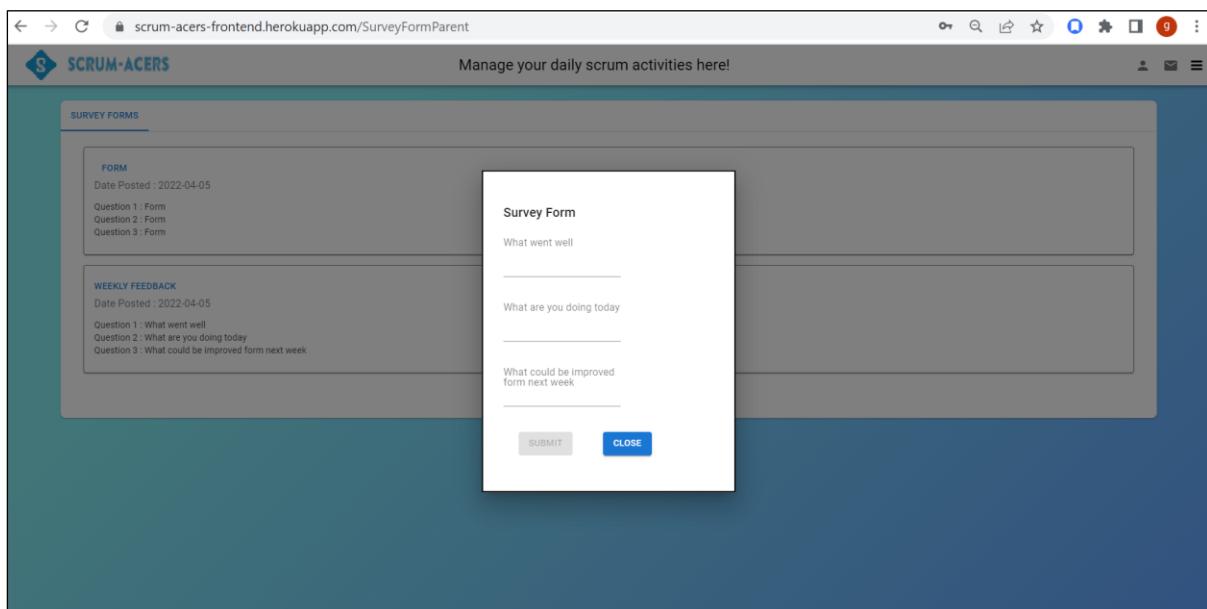


Figure 25: Survey form as viewed by employee

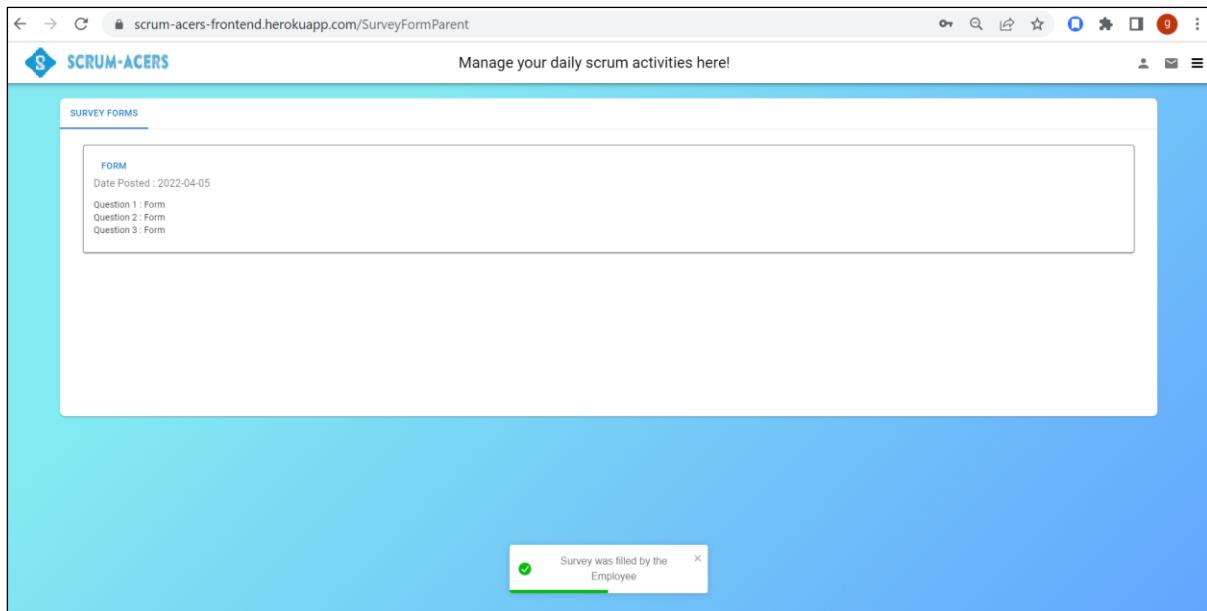


Figure 26: Survey form submitted by employee

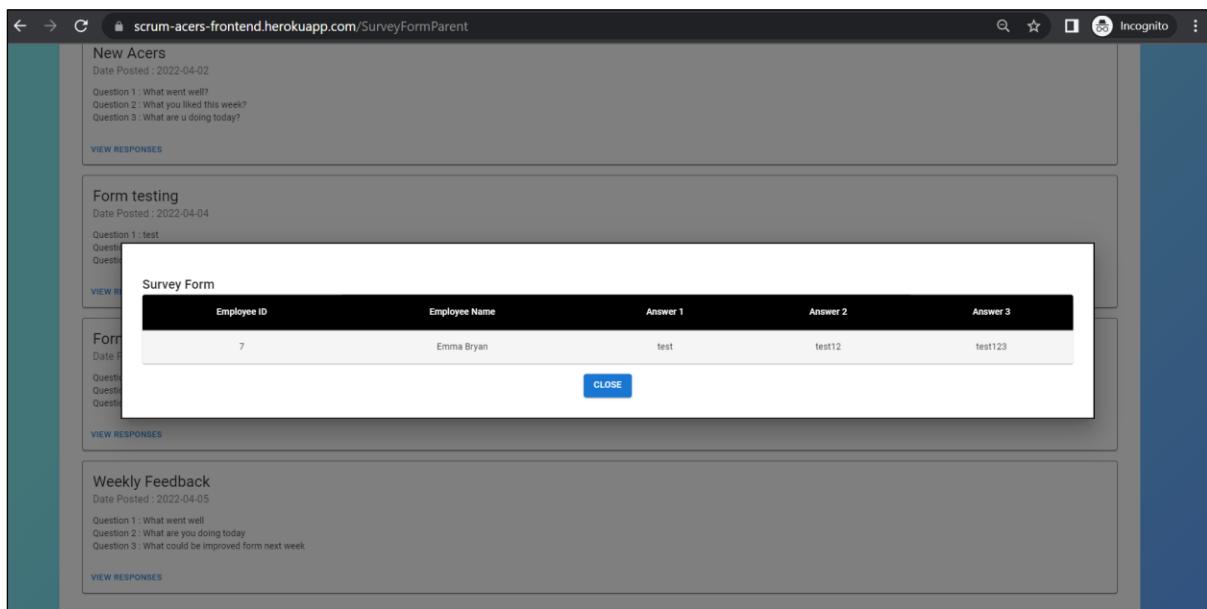


Figure 27: Survey form responses as viewed by manager

Feature 7 : Notification

Notification module is built for employees to get notified about the blockers.

- The employee has the option of adding number of blockers when they fill the daily scrum form
- Notification is sent to all members of the team that a specific employee is facing these number of blockers

Figure 28: Stand up form filled by an employee

Figure 29: Blocker notification sent to all team members

Feature 8 : Hours Tracking

- The team lead would be able to track the number of hours there teammates have worked for in a day
- The number of hours for each employee are recorded based on the login and logout time

Team Hours		
2022-04-04		
Employee_ID	Employee_Name	Hours Tracked
7	Emma Bryan	20:03:00
2022-04-03		
Employee_ID	Employee_Name	Hours Tracked
7	Emma Bryan	00:00:00
5	Brian Rogers	04:00:00
2022-04-02		
Employee_ID	Employee_Name	Hours Tracked
5	Brian Rogers	08:00:00

Figure 30: Team hours(Manager's view)

Feature 9 : User Creation and Deletion

The company owner , HR and the manager have the option to create new employees.

CREATE EMPLOYEE VIEW EMPLOYEE LIST

Employee Creation Form

First Name
Aditya

Last Name
Dixit

Email ID
adixit@dal.ca

Password

Employee Type
Junior Employee

Team Id
1

SUBMIT

Figure 31: Employee Creation Form

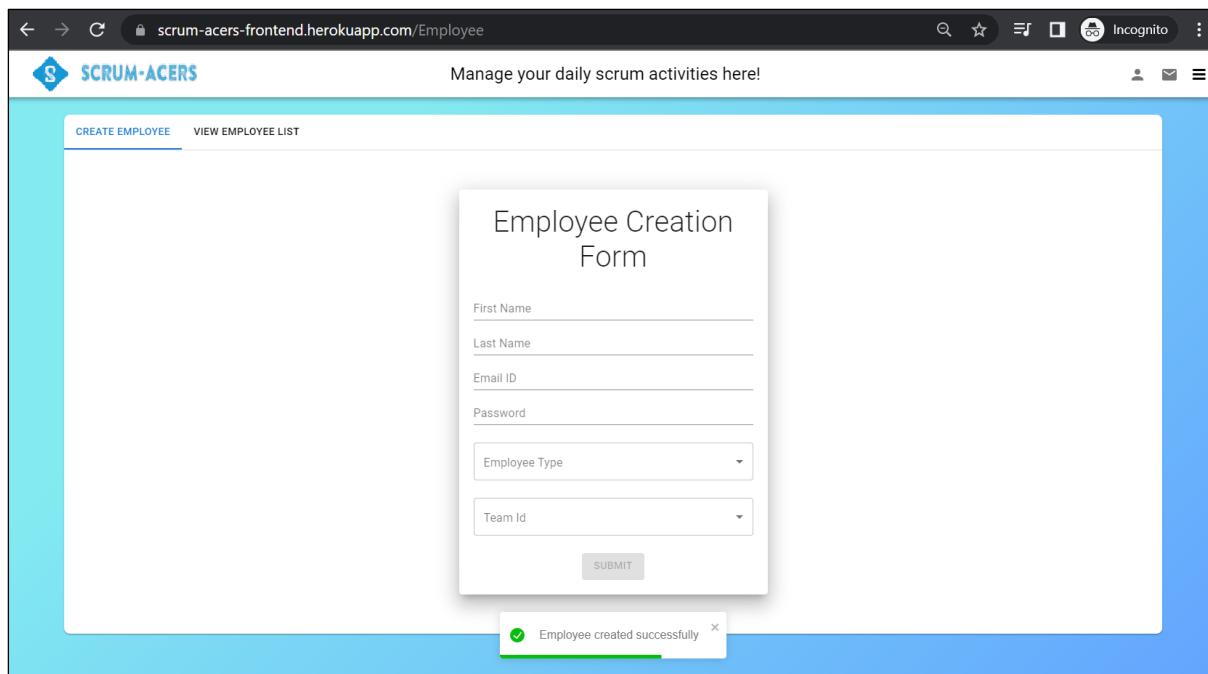


Figure 32 : After the employee is created successfully

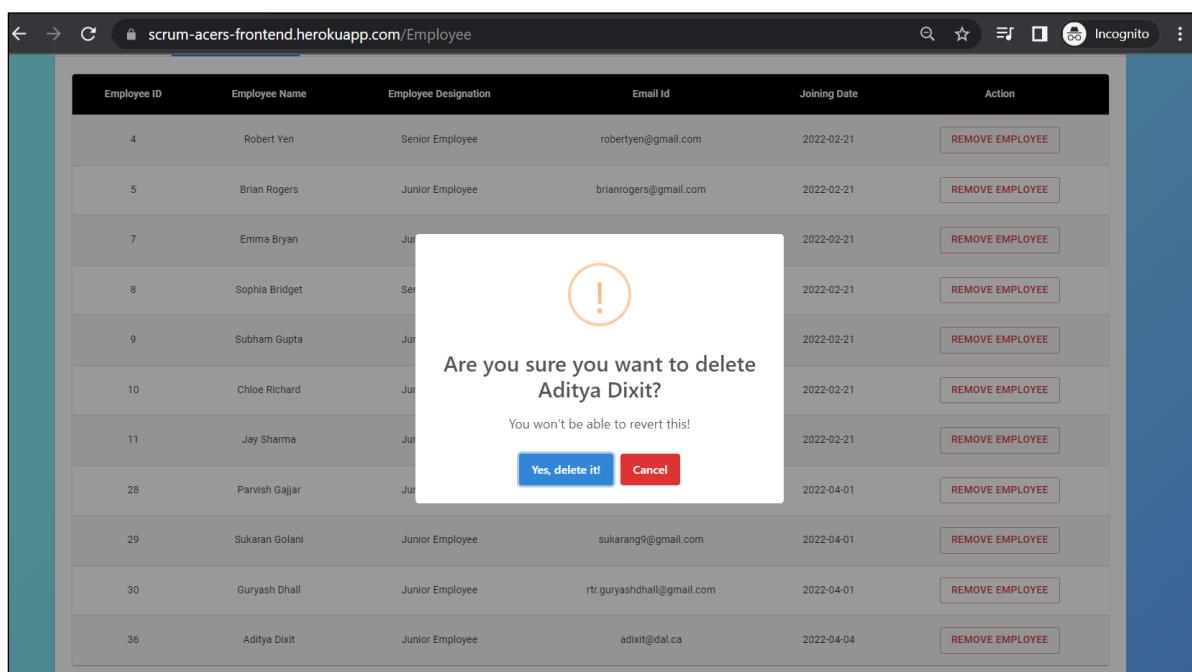


Figure 33 : When the management tries to delete the employee

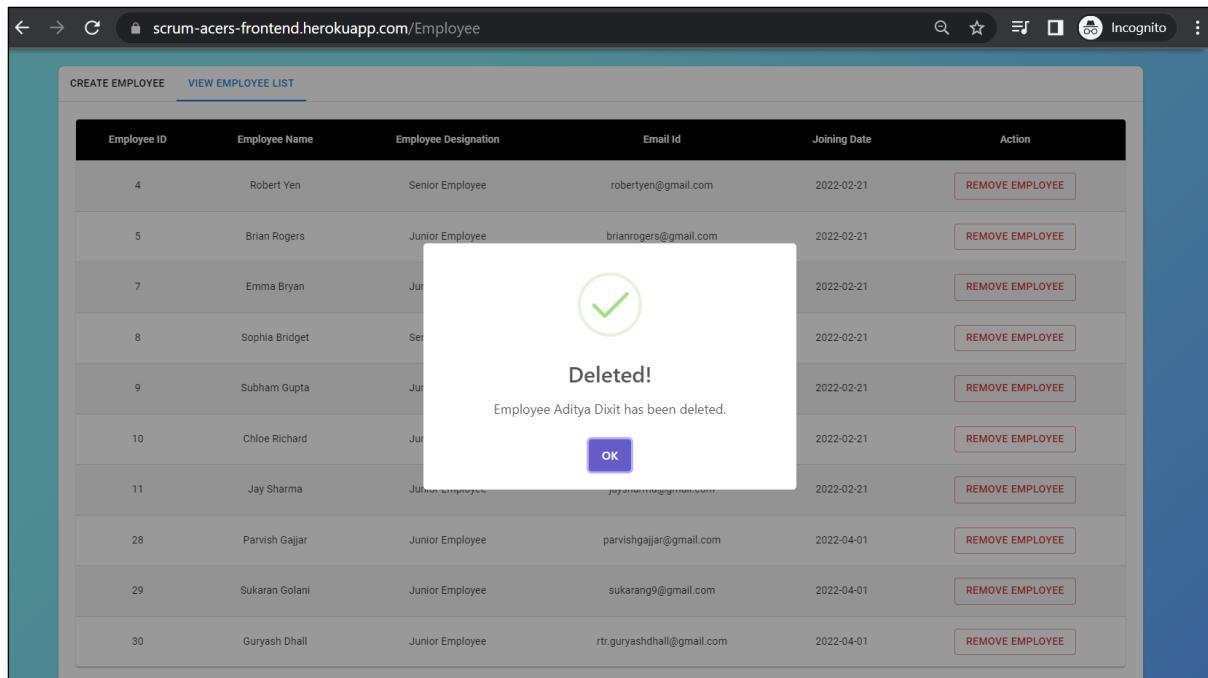


Figure 34 : After the employee is deleted successfully

Feature 10: User Profile View

User profile view is where users can see their information and view badges that are assigned to them by their respective managers.

- The user can view their profile by two different ways: wither clicking on the profile avatar from navbar or from the side menu where it is labelled as “My Profile”.
- This view has details like the team to which employee belongs, the number of leave application left for the employee, employee’s personal details and the badges earned by the employee as assigned by their respective manager.

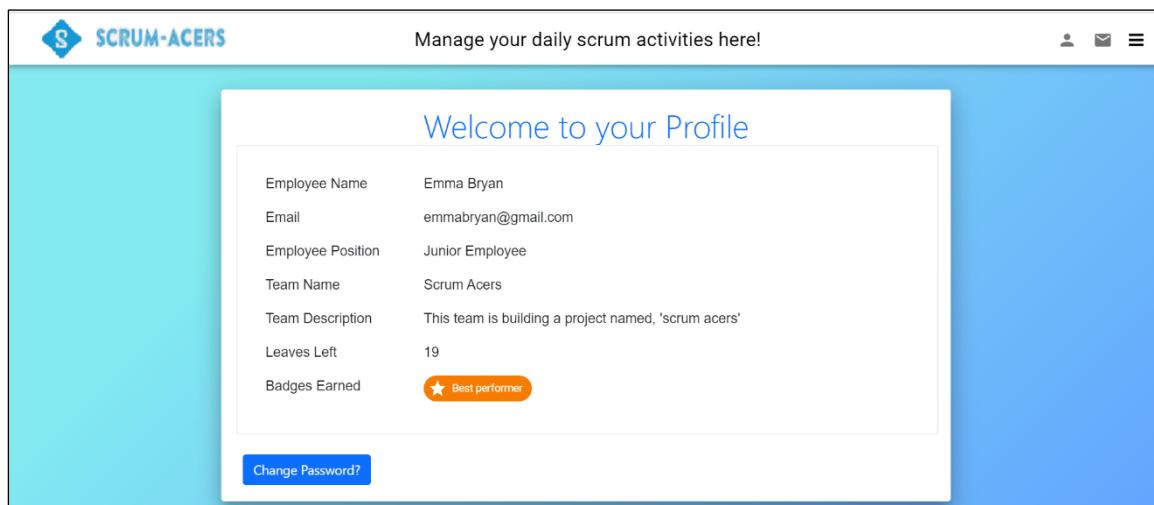


Figure 35:After the employee is deleted successfully

Feature 11: Managing User Passwords

1) Forgot Password

When the user forgets their password, one can click on the forgot password button, and the user is required to enter their email and an email with random password is sent, which can be used again by the user to re-login.

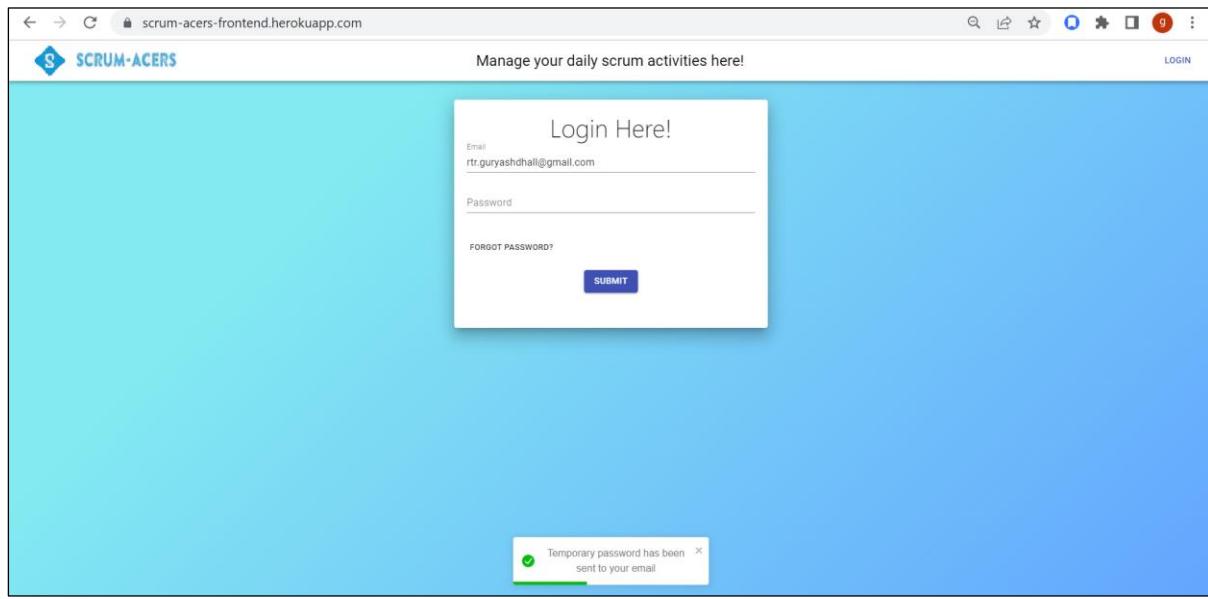


Figure 36: When the user clicks on forgot password

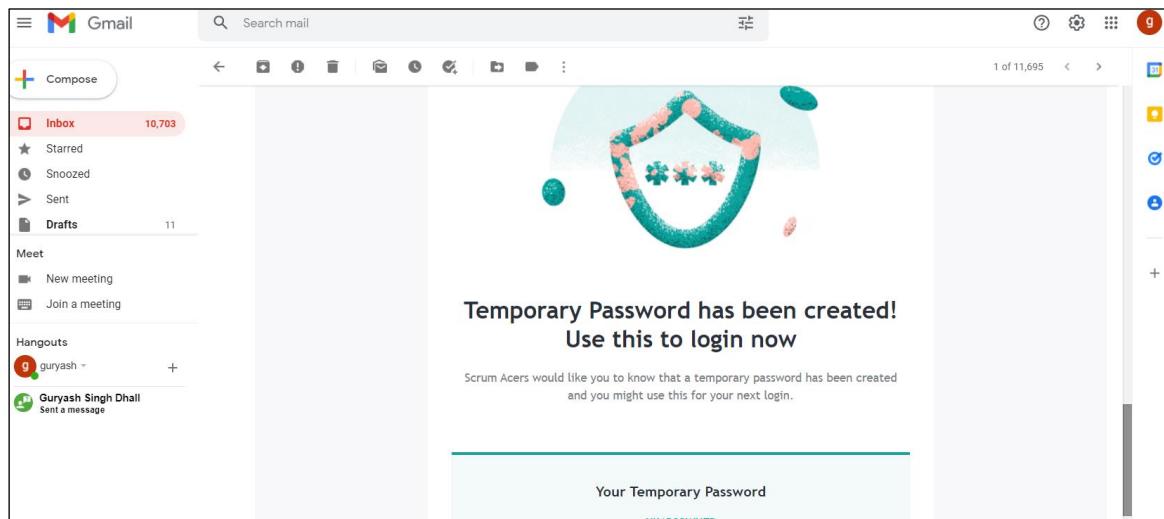


Figure 37: Temporary password has been sent to the email

2) Change Password

User has the option to change the login password from my profile page.

- Old password is authenticated
- Password validation is done for New Passwords

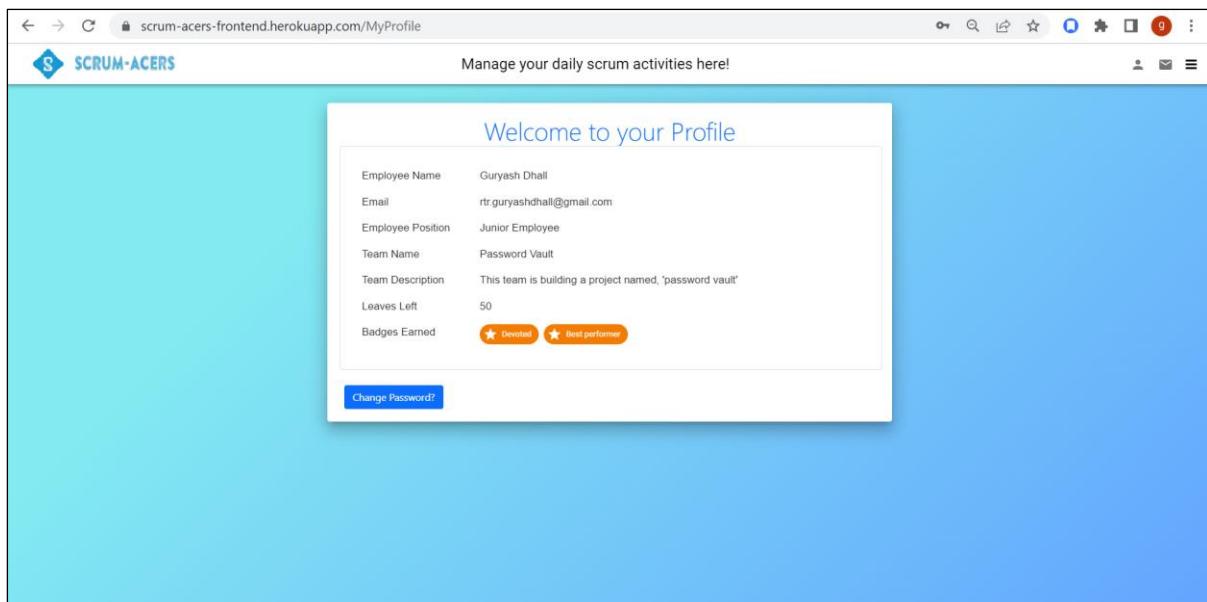


Figure 38: Change password button on “My Profile” of employees

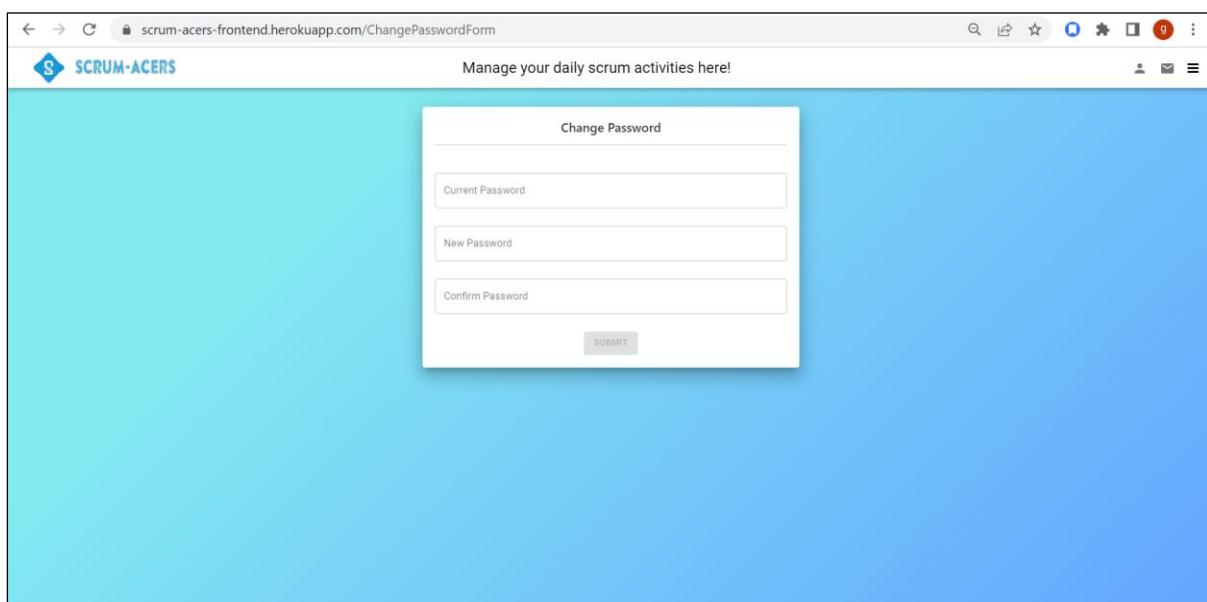


Figure 39: Change password page for employees

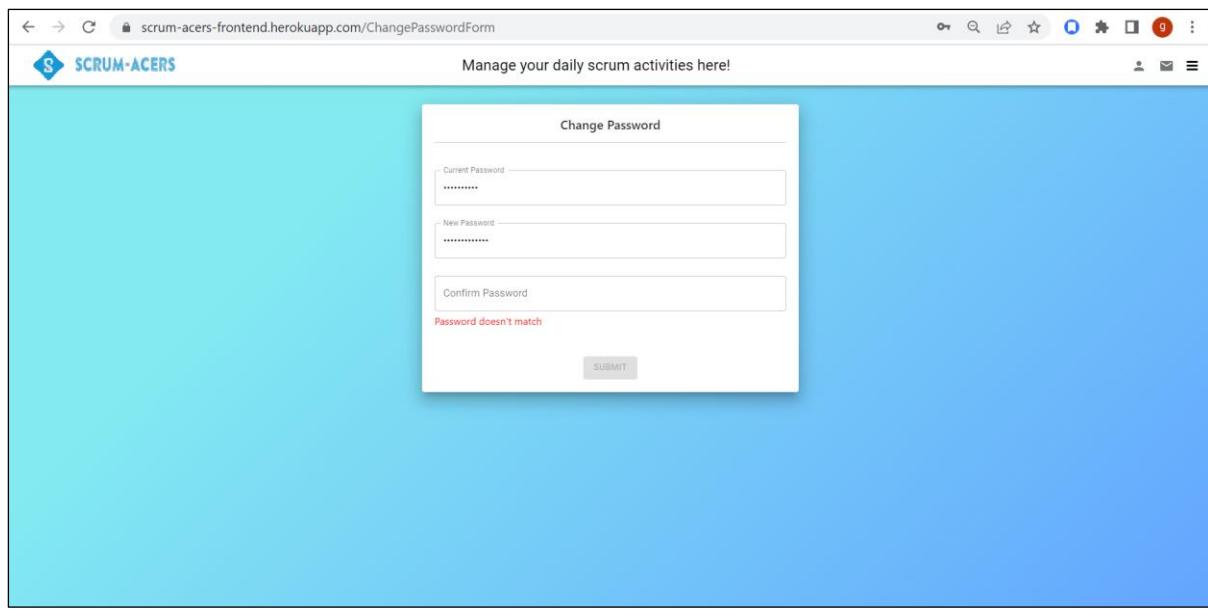


Figure 40:Validation for Passwords

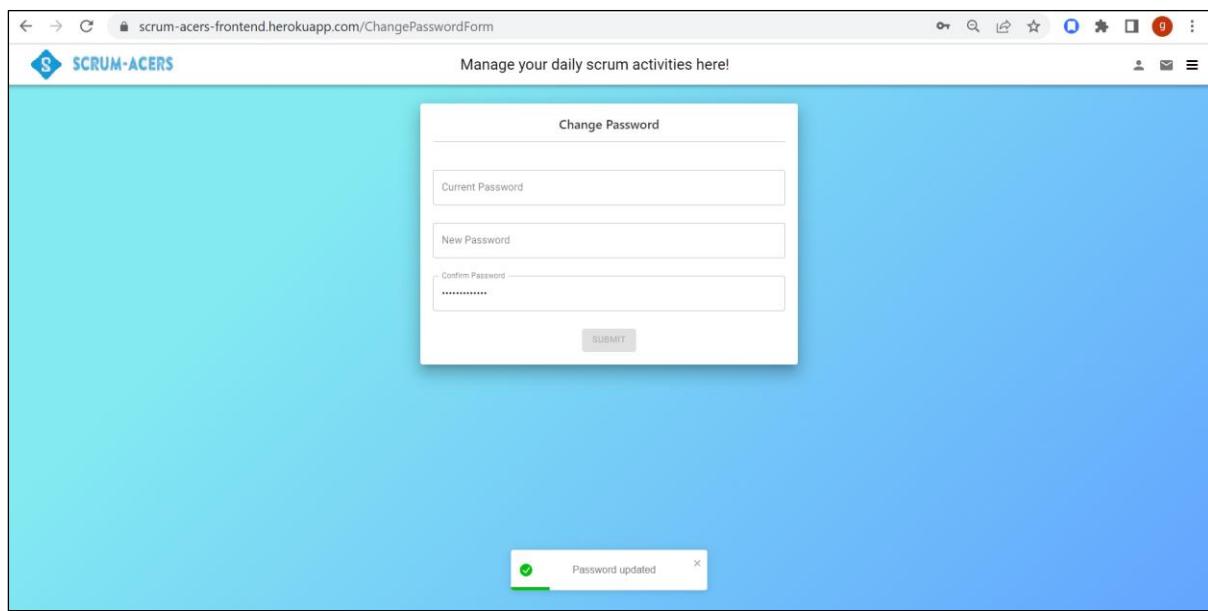
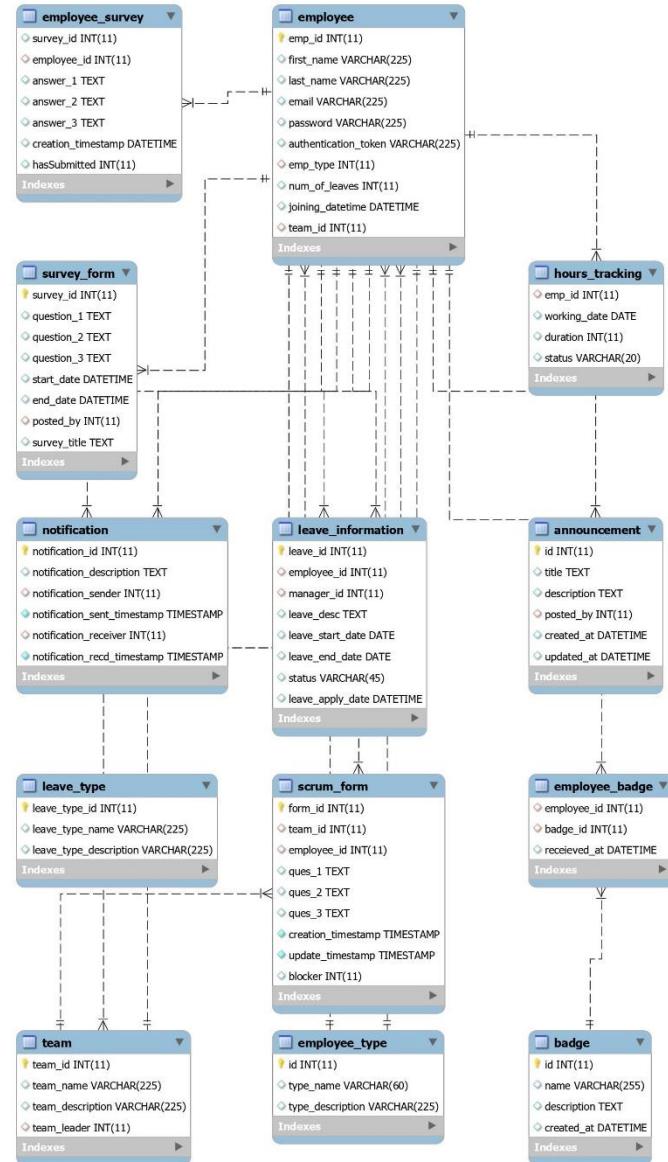


Figure 41:Passwords updated successfully

Database Entity Relationship Diagram



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