

Part 3 Design Document

Special notes/features and major changes made to the Data Model/Transformed model:

1. To send a message to another user: You need to visit the other user's profile page and enter your message on the left side box and click send.
2. Whenever you receive a message from someone on TIM-in-a-Suit, the website will automatically send an email to notify you that you have a new message.
3. Note: you need to use the navigation bar to get around TIM-in-a-Suit. If you refresh the page or (go back + go forward), the default view will always be your profile page.
4. Company search works by navigating to the part of the page that the company is at. So if you were at the top of the page and you were searching for a company at the bottom of the list, then the page would auto-scroll to the bottom. Conversely, if there are few companies / you are searching for a company already in your window view, search would not scroll / do nothing. If the company name you are searching for matches >60% of the first part of the company name in the database, it will scroll to that company. If the company doesn't exist, then an alert box will notify the user.
5. Code notes: there are some pieces of codes are somewhat similar (e.g. navigation bar, reviews in user profile and in other users' profile and in the single company page). Each version has subtle differences (e.g. reviews on the single company page show the user name in the header with a link to the user's profile page, whereas reviews on a user's own profile page shows the company name in the header with a link to the company page), so we feel that the code is quite different that it would be ok to put them in separate files rather than have them share a same format.
6. Creating a new company: In order to ensure the integrity of the list of companies (to prevent duplicates / errors in naming / fake companies), we will add a new company ourselves as admins of the website. So we did not provide a way for users to add their own company.
7. Our website handles errors by either posting an error message on the page (with a description / suggestion of what to do) or if the server fails for an unknown reason, an alert box with an error message will appear.
8. Currently, one MIT email can have multiple user accounts on our website. We chose to not enforce one email one account rule for now because it made testing our website with multiple users very difficult. In our final, final version, we would enforce that one MIT email would only be able to have one single account on our website by checking if that email already exists in our database.
9. Deleting a message: if a message is sent from User a to User b, if either User a or User b deletes the message, the message will be deleted from both Users' Messages view.
10. For this MVP, we decided to not implement upvoting / downvoting, Q&A and the option to delete a user as we feel these are not the most essential features of TIM in a Suit.
11. To support our authentication choice to ensure that the users have valid MIT email we decided to create a new collection for temporary user accounts, same as our current User collection. When a user creates a new account, a new temporary user account will be created if there's no user and temporary user account with the same username and

upon successful creation, an activation link will be sent to the user email and upon activation, the temporary account will be deleted and a new user will be created.

12. Username cannot have spaces or weird symbols.

Design Challenges

1. How to authenticate users as MIT students

Options:

A. MIT Certificates

Pros: Reliable external service so robust and guaranteed to work as expected.

Cons: Need an SSL packet and also approval from IS&T for a signed server certificate

B. Activator (node module for user activation and password reset)

Pros: Provides express middleware to perform user activation. Do not need to request setup anything outside of node / express.

Cons: Requires specific type of user model so would require changing our current model. Has a steep learning curve.

C. Nodemailer (node module for sending emails) + Temporary Collection

Pros: Nodemailer is easy to use and does not require any modification to user model

Cons: Need to setup up temporary collection for unconfirmed user accounts which are moved to permanent users collection upon users visit to activation url sent to MIT email address using nodemailer. Temporary collection automatically deletes user accounts that have been in it for longer than 12 hours to prevent build up of accounts for users that sign up but don't activate their accounts

Final Choice:

Nodemailer + Temporary Collection: Using MIT certificates would take too long to set and get the necessary permissions and using activator would have required us to significantly change our user model. Nodemailer + Temporary Collection is more work to setup because it requires both nodemailer and setting up a temporary collection that automatically deletes user accounts if they are not moved to the permanent collection within 12 hours of signing up.

2. How to design the way the user can post a new review / edit his/her review for a company in the user interface? The User can see his/her own reviews either in his/her Profile page or from Company page. Whether to include the edit/post option in both Profile and the Company page?

Options:

- A. Hidden review box, that appears if users click the new review or edit button.
Pros: User doesn't need to see the reviews box until they want to create a new review or edit their review
Cons: May not be obvious to user to find the review box.
- B. Fixed new review / edit review box that is always at the top of the single company page. In user profile, add an edit button for each review, that will redirect to the Company page and will be able to edit in the review box. But the user cannot post a new review from their profile, he/she can only post a new review from a company's page.
Pros: Can see your own review / create a new review, while scrolling through all the other reviews on the page. Easy to find and the focus is on editing/creating a new review. Plus, provides more flexibility for the user to see all his/her reviews and edit a review.
Cons: Takes up space on the single company page that otherwise would be used to show more reviews
- C. Same as B, but with added ability for the user to post a new review. Therefore, the user will be able to post/edit both from his/her Profile page and the Company page.
Pros: Provides more flexibility for the user to post and edit.
Cons: Repeated code, may also be confusing for the user. Not necessary for the user to have an option to post from his/her profile.

Final Choice:

Choice B. A user can only edit their review / post their review at a single company's page. On the user's own page, if he/she clicks on edit button, then it would redirect to the single company's page. On loading the page, it checks to see if the user already has a review for that company. If so, then the 'edit review' is shown, else the 'new review' is shown. This eliminates the need for the user to toggle between edit / new review and reduce the amount of errors possible (since we are enforcing that a user may not have more than one review per company).

3. How to design the messaging system in the user interface?

Options:

- A. Have a new link named Send Message in the User profile alongside My Messages and My Reviews, with a message box, where user can send a new message.
Pros: Might be convenient for the user to send a message when they are looking at their profile and wants to send a quick message.

Cons: Could be also very inconvenient. If the user wants to send a message, after looking at a review, he/she would have to go back to their profile and send a message. The user must correctly remember other user's usernames since there's no friends relation between users.

- B. Have a message box in the My Messages at the top of the Received/Sent Messages.

Pros: Same as A. But could be more convenient for the user to send a message while looking at his/her both received/sent messages.

Cons: Could also be very inconvenient when the user wants to send a message in one respect and ask a question after looking at a particular review, same as Cons for A.

- C. Have a message box in the Other User's Profile.

Pros: While looking at the reviews, the user can just click on the username of the poster and ask a question if he/she wants and will also be able to see the poster's other reviews as well.

Cons: Could be hard to send a message, if the user does not know the other user, will have to go to a company page and find the review.

Final Choice:

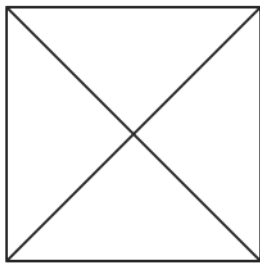
Choice C. A user can only send a message to other users by going to their profile. On the other user's profile, there will be a message box in the space where the User's own Profile has My Messages/ My Reviews sections. After sending a message the user will be redirected back to user's own profile. This option would allow the user ability to see other reviews as well. Since the users don't have either following or friends relation, the only way they could be connected is through the reviews, therefore, this option would be very convenient.

Wireframes

Login Page:

From here, upon successful login, the user will be redirected to his/her profile page. (User Profile with Messages Page). Otherwise, upon login fail, the page will be loaded again with appropriate error messages. Upon successful registration, this page will be loaded again with 'Please check your MIT email and activate your account' email. Upon registration fail, the page will also be loaded again with appropriate error messages.

Welcome to TIM in a Suit



Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a, nam lectus at nunc. Quam euismod sem, semper ut potenti pellentesque quisque. In eget sapien sed, sit dui vestibulum ultricies, placerat morbi amet vel, nullam in in lorem vel. In molestie elit dui dictum, praesent nascetur pulvinar sed, in dolor pede in aliquam, risus nec error quis pharetra. Eros metus quam augue suspendisse, metus rutrum risus erat in. In ultrices quo ut lectus, etiam vestibulum urna a est, pretium

Sign in

Username
Password

Login

Register

Username
Password
Email

Register

User's Profile with Messages Page:

By default, the user profile page will display the user's messages. From here, the user could click on MyReviews and in the same profile page, the user's reviews will be displayed instead of the user's messages. (The User Profile with Reviews page will be loaded.)

Upon loading the profile page for the first time or clicking on the My Messages link, user will be able to see his/her received and sent messages and delete his messages by clicking on the delete button of message. User could go to the message recipient or sender's profile by clicking on his/her name.

Navbar:

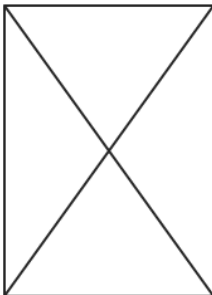
- Clicking on Profile will load the User Profile with Messages Page.
- Clicking on Logout will log the user out and load the login Page.
- Clicking on the Companies will load the Companies Page.

Welcome

Profile Companies Logout

Welcome, User!

[MyMessages](#)
[MyReviews](#)



Received Messages

from: OtherUser
Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a. nam lectus at nunc. Quam euismod sem. semper ut potenti
Delete

from: OtherUser
Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a. nam lectus at nunc. Quam euismod sem. semper ut potenti
Delete

Sent Messages

to: OtherUser
Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a. nam lectus at nunc. Quam euismod sem. semper ut potenti
Delete

User's Profile with Reviews Page:

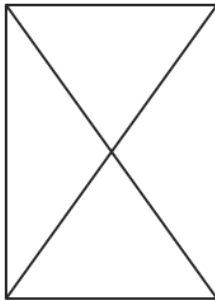
By clicking on My Messages, the user can go back to User's Profile with Messages page with his/her messages. Clicking on the company name will load the Company page. Clicking on edit button of a review will load also load the Company page where the user can edit his/her review. Clicking on a delete button of a review will delete that particular review.

Welcome

[Profile](#) [Companies](#) [Logout](#)

Welcome, User!

[MyMessages](#)
[MyReviews](#)



My Reviews

[Company A](#)

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a. nam lectus at nunc. Quam euismod sem. sempoer ut potenti

Edit

Delete

[Company D](#)

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a. nam lectus at nunc. Quam euismod sem. sempoer ut potenti

Edit

Delete

[Company Z](#)

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a. nam lectus at nunc. Quam euismod sem. sempoer ut potenti

Edit

Delete

Other User's Profile Page:

Same instructions as the User's Profile with Reviews Page apply with few exceptions. There's a message box instead of the My Messages/ My Reviews links. The visitor can only see other user's reviews and send him/her a message. Clicking on Send button of the message box will send a message and load the User Profile with Messages Page.

Welcome

[Profile](#) [Companies](#) [Logout](#)

OtherUser Name

Send Message

Your message here

Send

Reviews

from: [OtherUser](#)

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a. nam lectus at nunc. Quam euismod sem. semoer ut potenti

Delete

from: [OtherUser](#)

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a. nam lectus at nunc. Quam euismod sem. semoer ut potenti

Delete

All Companies Page:

Clicking on the Company name will load that particular company's page.

Search option is added in the navbar and the user can search a company by typing the company name in the search and the view will scroll to the company info if it exists. If the company/company description is already in view, then search will not scroll.

Welcome

[Profile](#)

[Companies](#)

[Logout](#)

Company A

Company description

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a, nam lectus at nunc. Quam euismod sem, semper ut potenti pellentesque quisque. In eget sapien sed, sit duis vestibulum ultricies, placerat morbi amet vel, nullam in in lorem vel. In molestie elit dui dictum, praesent nascetur pulvinar sed, in dolor pede in aliquam, risus nec error quis pharetra. Eros metus quam augue suspendisse, metus rutrum risus erat in. In ultrices quo ut lectus, etiam vestibulum urna a est, pretium luctus euismod nisi, pellentesque turpis hac ridiculus massa. Venenatis a taciti dolor platea, curabitur lorem platea urna odio, convallis sit pellentesque lacus proin.consequat imperdiet penatibus enim, tristique luctus tellus eos accumsan, ridiculus erat laoreet nunc.

Company B

Company description

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a, nam lectus at nunc. Quam euismod sem, semper ut potenti pellentesque quisque. In eget sapien sed, sit duis vestibulum ultricies, placerat morbi amet vel, nullam in in lorem vel. In molestie elit dui dictum, praesent nascetur pulvinar sed, in dolor pede in aliquam, risus nec error quis pharetra. Eros metus quam augue suspendisse, metus rutrum risus erat in. In ultrices quo ut lectus, etiam vestibulum urna a est, pretium luctus euismod nisi, pellentesque turpis hac ridiculus massa. Venenatis a taciti dolor platea, curabitur lorem platea urna odio, convallis sit pellentesque lacus proin.consequat imperdiet penatibus enim, tristique luctus tellus eos accumsan, ridiculus erat laoreet nunc.

Single Company Page (Posting New Review):

The user can have at most one review for each company. Therefore, upon loading particular company's page, if the user does not already have a review, this Page will be loaded with an option to post a new review, or otherwise the below Single Company Page (Edit Review) will be loaded. By clicking on Post, the user will be able to post a new review and upon successful creation of a new user, the below Single Company Page (Edit Review) will also be loaded and appropriate success message will be displayed. The user can go to other user's profile by clicking on their username (The user's own username will not be a link, and thus, user cannot click on his/her name.). There will be no edit/delete option in this page since he/she cannot edit/delete other users' reviews.

Welcome

[Profile](#) [Companies](#) [Logout](#)

Company Name

Rating

Company Description

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a, nam lectus at nunc. Quam euismod sem, semper ut potenti pellentesque quisque. In eget sapien sed, sit dui vestibulum ultricies, placerat morbi amet vel, nullam in in lorem vel. In molestie elit dui dictum, praesent nascetur pulvinar sed, in dolor pede in aliquam, risus nec error quis pharetra. Eros metus quam augue suspendisse, metus rutrum risus erat in. In ultrices quo ut lectus, etiam vestibulum urna a est, pretium luctus euismod nisl, pellentesque turpis hac ridiculus massa. Venenatis a consequat imperdiet penatibus enim, tristique luctus tellus eos accumsan, ridiculus erat laoreet nunc.

Post Your Review

Review here

Rating here

Post

Reviews about Company

[OtherUser](#)

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a, nam lectus at nunc. Quam euismod sem, semper ut potenti pellentesque quisque. In eget sapien sed, sit dui vestibulum ultricies, placerat morbi amet vel nullam in in lorem vel In molestie elit dui dictum praesent

[OtherUser](#)

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a, nam lectus at nunc. Quam euismod sem, semper ut potenti pellentesque quisque. In eget sapien sed, sit dui vestibulum ultricies, placerat morbi amet vel nullam in in lorem vel In molestie elit dui dictum praesent

Single Company Page (Edit User's Review):

Upon loading particular company's page, if the user already has a review or just posted a new review, this page will be loaded. From here, the user will be able to edit/delete his/her own review by clicking on the appropriate buttons of his/her review. Same as the Post Review Page, user can visit an author of other reviews by clicking on their username.

Welcome

[Profile](#) [Companies](#) [Logout](#)

Company Name

Rating

Company Description

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a, nam lectus at nunc. Quam euismod sem, semper ut potenti pellentesque quisque. In eget sapien sed, sit dui vestibulum ultricies, placerat morbi amet vel, nullam in in lorem vel. In molestie elit dui dictum, praesent nascetur pulvinar sed, in dolor pede in aliquam, risus nec error quis pharetra. Eros metus quam augue suspendisse, metus rutrum risus erat in. In ultrices quo ut lectus, etiam vestibulum urna a est, pretium luctus euismod nisl, pellentesque turpis hac ridiculus massa. Venenatis a consequat imperdiet penatibus enim, tristique luctus tellus eos accumsan, ridiculus erat laoreet nunc.

Edit Your Review

Current review details here

Current rating here

Edit Post

Reviews about Company

CurrentUser

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a, nam lectus at nunc. Quam euismod sem, semper ut potenti

Edit

Delete

[OtherUser](#)

Lorem ipsum dolor sit amet, maiores ornare ac fermentum, imperdiet ut vivamus a, nam lectus at nunc. Quam euismod sem, semper ut potenti pellentesque quisque. In eget sapien sed, sit dui vestibulum ultricies, placerat morbi amet vel nullam in in lorem vel. In molestie elit dui dictum praesent