Team Members:
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Problem Statement:

A common issue that employees such as ourselves face at hourly jobs is a lack of efficient, convenient, and transparent scheduling applications.To mitigate this issue, ManageHelp provides a platform for managers to create, edit, and post schedules and for employees to view their weekly schedule, request days off, and trade shifts. In most workplaces, these functions are scattered across several platforms, are too cluttered and difficult to use, or not available at all. ManageHelp's objective would be to finally unify these functions and help reduce the high amount of stress employers and employees alike are under in service, fast food, and other industries.

Background:

Userbase:

Workplaces, especially those that have many hourly employees like the fast food and retail industries, have an urgent need for a simple scheduling software that allows employees to quickly view their schedule for the week. Individual franchises or corporate stores can deploy ManageHelp to create, edit, and post schedules for their workforce week by week.

Similar Platforms:

Products do exist to try and provide employers with scheduling functionality. When I Work, 7Shifts, Jolt, and other products do provide the ability to create and post schedules but they all lack the ability of employees to chat with each other, cover each other's shifts, etc. The products that do try and incorporate those features lack a convenient interface that is easy to learn and use.

Limitations:

Despite these industries being worth billions of dollars, many franchises don't provide ways for employees to view their schedules online, request days off, or request fellow employees to cover their shifts. The existing software solutions are antiquated and/or do not incorporate all of its functionality in one place.

Requirements:

Functional:
1. As a user, I would like to be able to create my account on ManageHelp
2. As a user, I would like to be able to login to my ManageHelp account
3. As a manager, I would like to be able to create my company's ManageHelp workspace

4. As an employee, I would like to be able to join my company's ManageHelp workspace
5. As a manager, I would like to be able to remove and invite employees to our workspace
6. As a manager, I would like to be able to assign roles and pay rates to employees
7. As a manager, I would like to be able to view information about my employees in an easy to read format
8. As a manager, I would like to be able to input my company's weekly hours into the schedule template
9. As a manager, I would like to be able to create weekly schedules several weeks in advance
10. As an employee, I would like to be able to view any finished schedules when posted by the manager
11. As a manager I would like to be able to view any online reviews
12. As a user, I would like to have a system where I can communicate with other users via email or a chat system conveniently
13. As an employee, I would like to submit requests for certain days off
14. As a manager, I would like to be able to approve and reject employee day off requests
15. As an employee, I would like to be able to request other employees cover a shift and accept other employees covered shifts
16. As a manager, I would like to be able to veto employee shift trades/coverages
17. As a user, I would like to be able to access ManageHelp on both desktop and mobile platforms
18. As a manager, I would like to be able to view expected labor costs for a day or week
19. As a manager, I would like to be able to order product for the store
20. As a manager, I would like to be able to order employee and manager merchandise
21. As an employee, I would like to be able to receive notifications when my schedule is updated
22. As an employee, I would like to be able to input scheduling restrictions

23. As a manager, I would like to be able to delegate scheduling permissions to shift managers
24. As a manager, I would like to be able to receive overtime warnings if an employee is overscheduled
25. As a user, I would like my password to not be stored in plaintext
26. As a user, I would like to be able to recover my password via (email, security questions?)
27. As a user, I would like the chat feature to be connected with my phone number and/or email
28. As a user, I would like to see the specific tasks that I've been assigned to do by my manager
29. As a manager, I would like to see what upper management is assigning to my store and/or all stores

30. As an user, I would like to view my earnings with and without tax
31. As an user, I would like to see options for a retirement plan
32. As a user, I would like an anonymous way to report incidents to HR
33. As a manager, I would like ways to post announcements
34. As a user, I would like a way to easily navigate between different workspaces if I work two jobs

Non-functional:

Architecture and Performance
ManageHelp will be developed using the popular development stack MERN (MongoDB, Express, React, Node) due to the significant documentation that exists for all of these. It has proven to be effective in the past and we expect it to continue being that way. We will use Express and Node in tandem on the server side as the middle ground between the frontend (React) and our database (MongoDB). We will host the database using the cloud computing platform MongoDB Atlas.

Usability
ManageHelp needs to have an interface that is intuitive and quick to learn. Employees should not have to spend large amounts of time trying to complete simple tasks like rescheduling a shift. Managers also need to be able to build schedules quickly since they undoubtedly have more pressing matters to attend to when they are on the clock managing a shift. The UI should be similar for both employees and managers except with more functions for managers to make promotions easy.

Security
Since people's jobs are their livelihoods, protecting accounts they use for work is extraordinarily important. We must develop ManageHelp to protect against common attacks like input box injections and recovery of passwords by unauthorized persons. User input must be cleaned to protect from webform hacking, in addition MongoDB supports several authentication protocols that may be of use for protecting against unauthorized database access and SQL-injection style attacks. Users also must not be able to view information not relevant to the execution of their jobs, and employees can not be able to execute functions intended for managerial roles.

Scalability
We will focus the most on our API to make portability to different platforms convenient. We will also keep most of the logic of the program on the server side to ensure implementation is not difficult. Once the app is deployed, we will use horizontal scaling for easy expansion. Also in terms of traffic scalability MongoDB is NoSQL based, this means it can handle more traffic by simply adding servers to the database.