

# **Screen Sketches**

## CyStaff

---

Team IP\_104 | Yi Ang, Logan Roe, Andrew Sand, Rodrigo  
Santamaria

## Actors

1. Employee: Has the following system privileges:
  - Log into the service using their account
  - Schedule a meeting
  - Search the employee directory
  - Track and add their time
  - Set reminders
  - Set To-Do List Tasks
  
2. Building Administrator: Same as employee and the following:
  - Approve meetings for their assigned building
  - Create announcements
  
3. System Administrator: Same as employee and the following:
  - Create/remove users
  - Approve time cards
  - Create announcements
  - Create rooms/buildings/locations in the server

## Non-functional Requirements

Sorted as higher to lower priority:

- The application needs to work on Android
- The application must support a minimum of 100 active users
- App UI response time should be less than 1 second
- The application must be able to support storing meeting information relating to all of the building on Iowa State's campus
- Meetings can not have overlapping locations
- Not allowed to take screenshots/videos while in the application

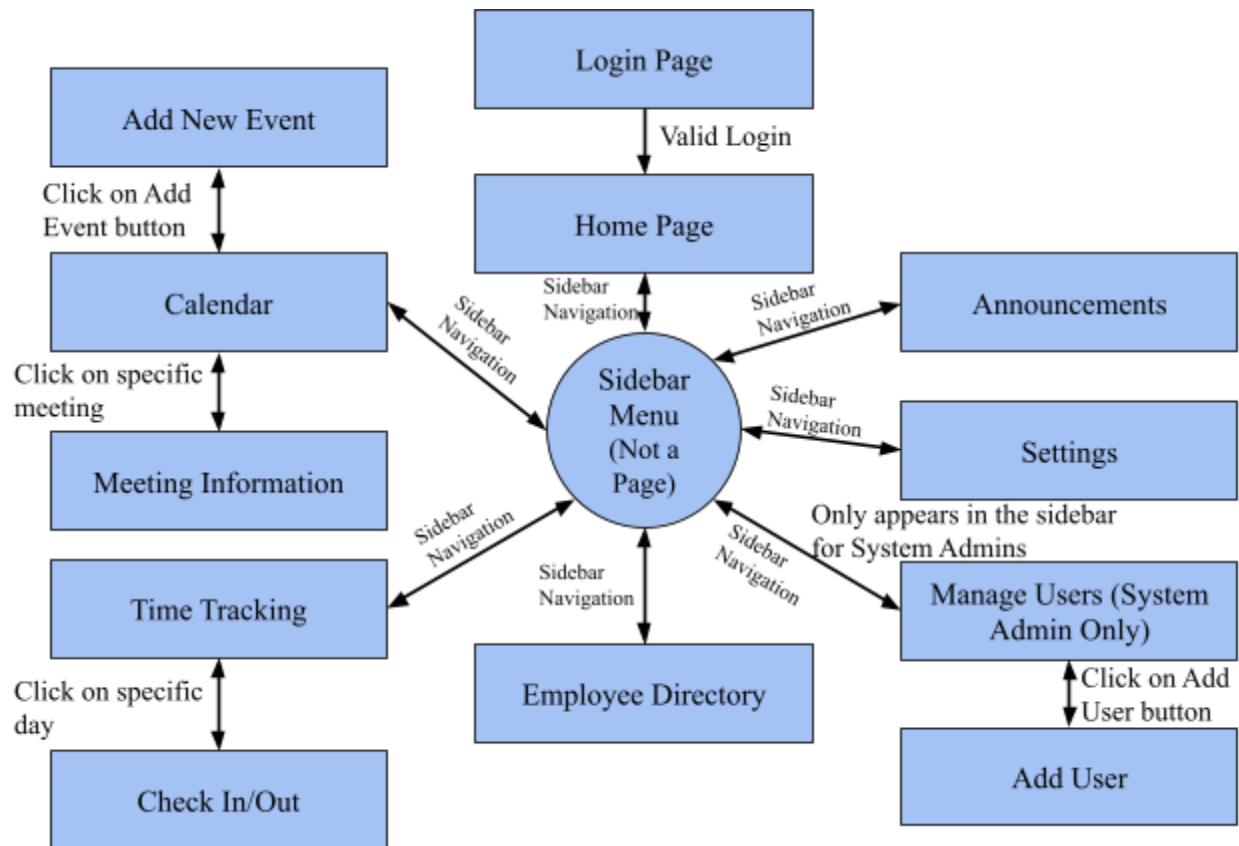
## Tables and Fields

- **Privilege:** Tracks the system privileges and their names
  - Privilege ID - Primary key
  - Name
- **Status:** stores the different types of status for the different (events)
  - Status ID - Primary key
  - Name
- **User:** saves the personal and non-personal information of a user
  - User ID - Primary key
  - Privilege ID - Foreign key
  - Password
  - Name
  - Last Name
  - Birthday
  - Phone
  - E-mail
  - Building
  - Department
  - Active/Inactive
  - Last login time
- **Announcement:** contains the details of an announcement
  - Announcement ID - Primary key
  - Creator - Foreign key
  - Message
  - Date/Time
- **Announcement & Recipients:** contains the relation of announcements sent to recipients
  - Ann & Recipients ID - Key
  - Announcement ID - Foreign key
  - Recipient - Foreign key
- **Building:** saves the information of a building
  - Building ID - Primary key

- Name
- Location
- **Room:** contains the information of the rooms
  - Room ID - Primary key
  - Building ID - Foreign key
  - Number/Name
  - Purpose(s)
- **Meeting:** stores the information of in-person and virtual meetings
  - Meeting ID - Primary key
  - Room - Foreign key
  - Status ID - Foreign key
  - Purpose
  - Date/Time
  - Details
- **Meeting & Attendees:** contains the relationship between meetings scheduled for users
  - Meetings & attendees ID - Primary key
  - Meeting ID - Foreign key
  - User ID - Foreign key
- **Task:** stores the information of tasks
  - Task ID - Primary key
  - Creator - Foreign key
  - Status ID - Foreign key
  - Description
  - Due date
- **Task & Employees:** stores the relationship between tasks and assignees
  - Task & Employees ID - Primary key
  - Task ID - Foreign key
  - Assignees - Foreign key
- **Hour\_Type:** stores the different types of hours (regular, overtime, etc.)
  - Hour type ID - Primary key
  - Name

- **Hour:** stores the worked hours during a shift by a user
  - Hour ID - Primary key
  - Hour type ID - Foreign key
  - User ID - Foreign key
  - Status ID - Foreign key
- **Reminder:** stores the information of the reminders
  - Remainder ID - Primary key
  - Creator - Foreign key
  - Description
  - Due date
- **Reminders & Employees:** stores the relationship between reminders and assignees
  - Reminder & Employee ID - Primary key
  - Reminder ID - Foreign key
  - User ID - Foreign key

## Flow Diagram



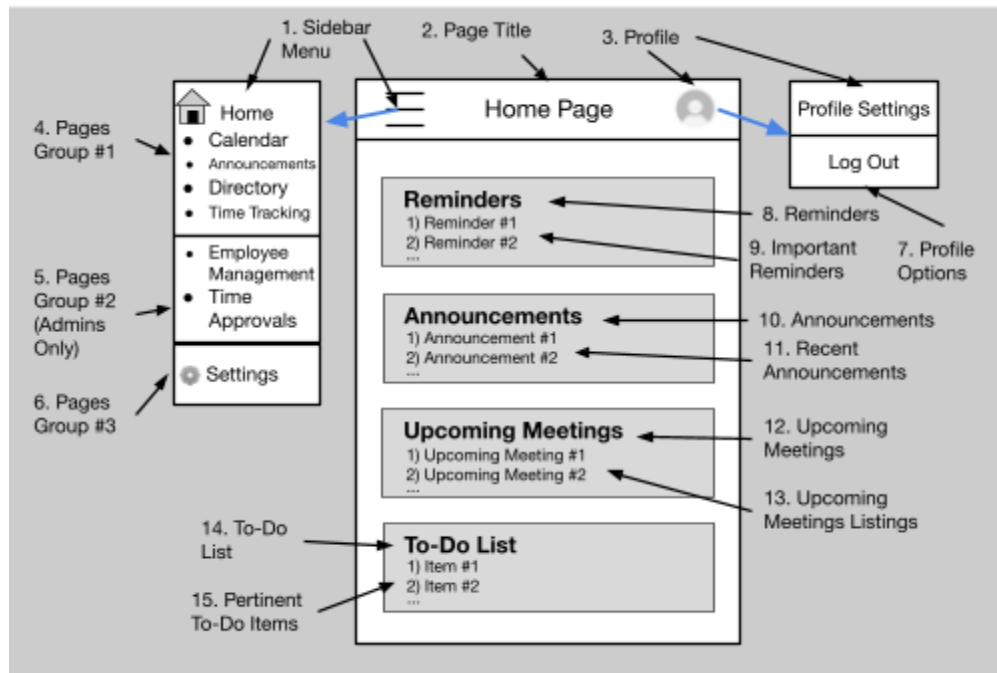


Figure 1 - Home Page

This screen serves as the landing page after users log in to the application. On the home page, users can see upcoming, recent, or relevant reminders, announcements, meetings, and to-do list items before navigating to their desired page using the sidebar menu.

1. Sidebar Menu - A button in the header present on most pages. Pressing it opens the Sidebar menu consisting of the three Pages Groups.
2. Page Title - The title of the current screen, which is "Home Page" in this case.
3. Profile - A button in the header present on most pages. Pressing it opens the Profile Options dropdown menu.
4. Pages Group #1 - Contains buttons that take the user to the Home, Calendar, Announcements, Directory, and Time Tracking pages, respectively.
5. Pages Group #2 (Admins Only) - This group of buttons is only visible to administrator users. It contains buttons that will take the user to the employee management and time approvals screens.
6. Pages Group #3 - Consists of the Settings button, which takes the user to the setting screen.
7. Profile Options - A dropdown menu opened from pressing the Profile button. The Profile Settings option will take the user to the "User Settings" portion of the setting page. The Log Out option will log the user out of their account and return them to the login page.
8. Reminders - A section listing top reminders from the user's reminder list.
9. Important Reminders - Top reminders for the user based on time or priority.
10. Announcements - A section listing the most recent announcements.
11. Recent Announcements - A list of the most recent announcements on the system.
12. Upcoming Meetings - A section listing upcoming meetings the user is signed up for.
13. Upcoming Meetings Listings - A list of the user's soonest scheduled upcoming meetings.
14. To-Do List - A section listing top items from the user's to-do list.
15. Pertinent To-Do Items - Top items from the user's to-do list based on time or priority.



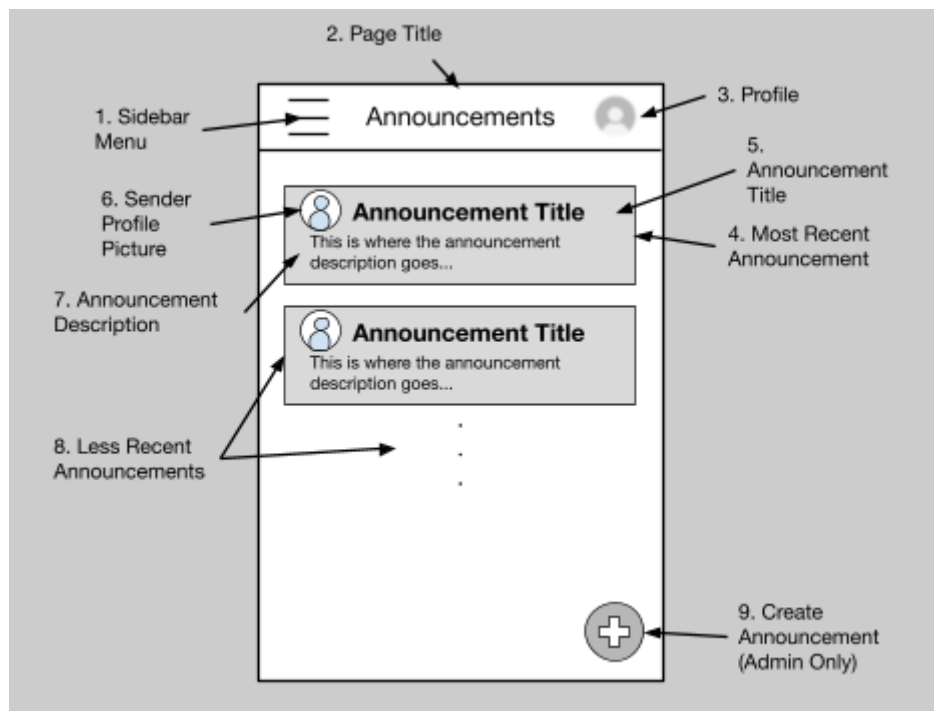


Figure 2 - Announcements

The announcements screen allows users to view various text announcements sent out by administrators, sorted from most to least recent. Each announcement is displayed as a card with a title, a description, and the sender's profile picture. There is also a plus button near the bottom that only appears if the logged-in user is an administrator. The button takes the user to a separate screen when pressed to input information about a new announcement before sending it.

1. Sidebar Menu - Described in detail in the home figure (1).
2. Page Title - The title of the current screen, which is "Announcements" in this case.
3. Profile - Described in detail in the home figure (1).
4. Most Recent Announcement - The most recent announcement sent out through the system Announcements are displayed as cards.
5. Announcement Title - The title of the announcement the card pertains to.
6. Sender Profile Picture - The profile picture of the admin user that created and sent out the announcement.
7. Announcement Description - The description text of the announcement. I.E. text informing system users of upcoming maintenance.
8. Less Recent Announcements - Prior, less recent announcements sent out by administrator users. The list is sorted from most to least recent, and the page will be able to be scrolled down if there are more announcements than what fit on a single view.
9. Create Announcement (Admin Only) - This button only appears if the logged in user is an administrator. Pressing the button will take the user to another screen to create and send out an announcement by inputting the relevant information.

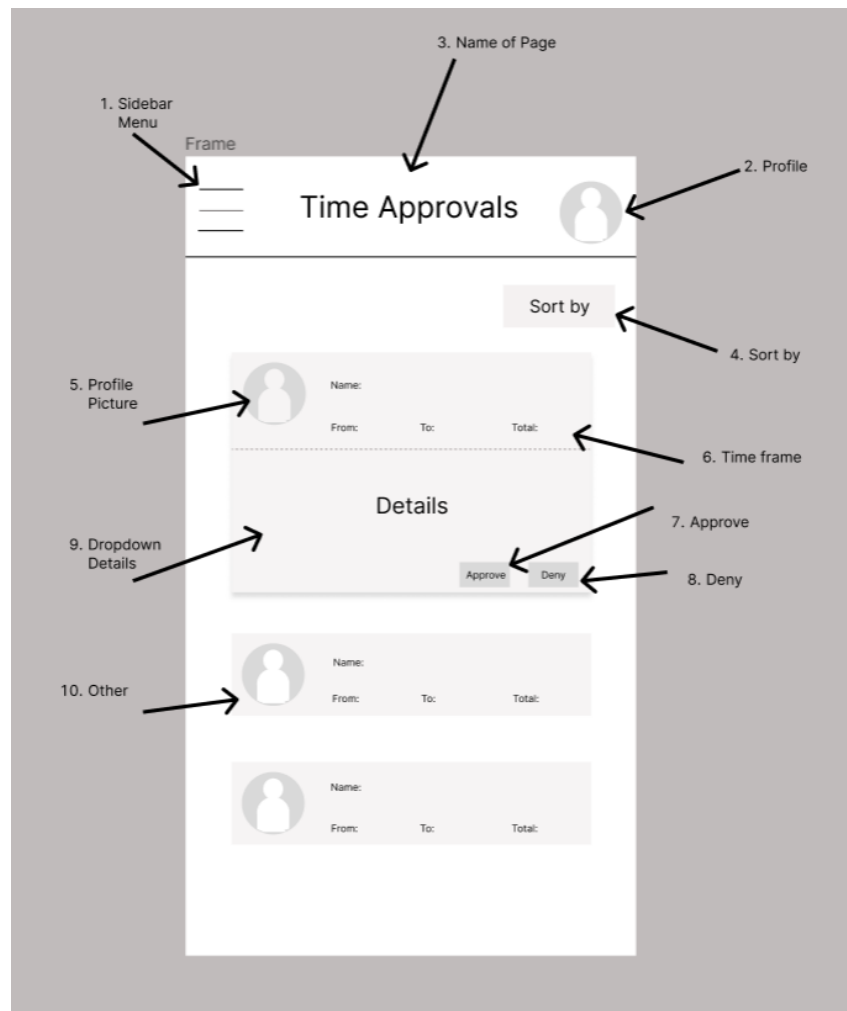


Figure 3 - Time Approval

This screen can only be accessed by System Admins through the sidebar menu and allows them to approve or deny time cards. The sort by button allows System Admins to sort the requests according to their preferences.

1. Menu - Talked about in detail in the home figure (1).
2. Profile - Talked about in detail in the home figure (1).
3. Name of Page - Name of the current screen which is Time Approvals.
4. Sort by - Can be used to sort the requests alphabetically, total time, etc.
5. Profile Picture - Shows the profile picture of the employee with the request.
6. Time frame - Shows the name of the employee as well as the time frame, and total time.
7. Approve - Button to approve the request. Request removed from screen after approval.
8. Deny - Button to deny the request. Request removed from screen after denial.
9. Dropdown Details - The employee's work time details, accessed by clicking on the request which enables a dropdown.
10. Other - List of other work time requests by other employees.

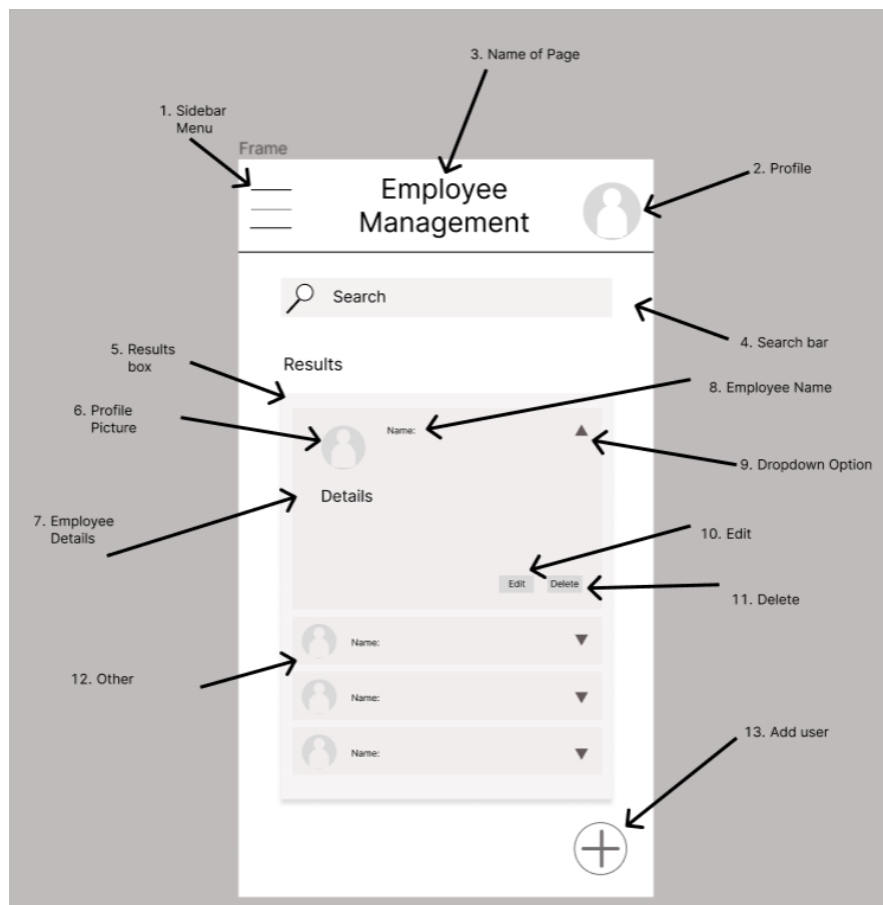


Figure 4 - Employee Management

This screen can only be accessed by System Admins through the sidebar menu and allows them to edit, delete as well as create new users. It features a search bar that allows system admins to look up employees by their name.

1. Sidebar Menu - Talked about in detail in the home figure (1).
2. Profile - Talked about in detail in the home figure (1).
3. Name of Page - Name of the current screen which is Employee Management.
4. Search bar - Used to look up employees using their name.
5. Results box - Box featuring the results from the search.
6. Profile picture - Profile picture of the employee
7. Employee Details - Description of the employee
8. Employee Name - Name of the employee
9. Dropdown Option - A dropdown option to view the details as well as to edit and delete employees.
10. Edit - Edit employee information and details.
11. Delete - Delete the employee from the database.
12. Other - List of other results based on the search.
13. Add user - Switches the screen to the New User screen.

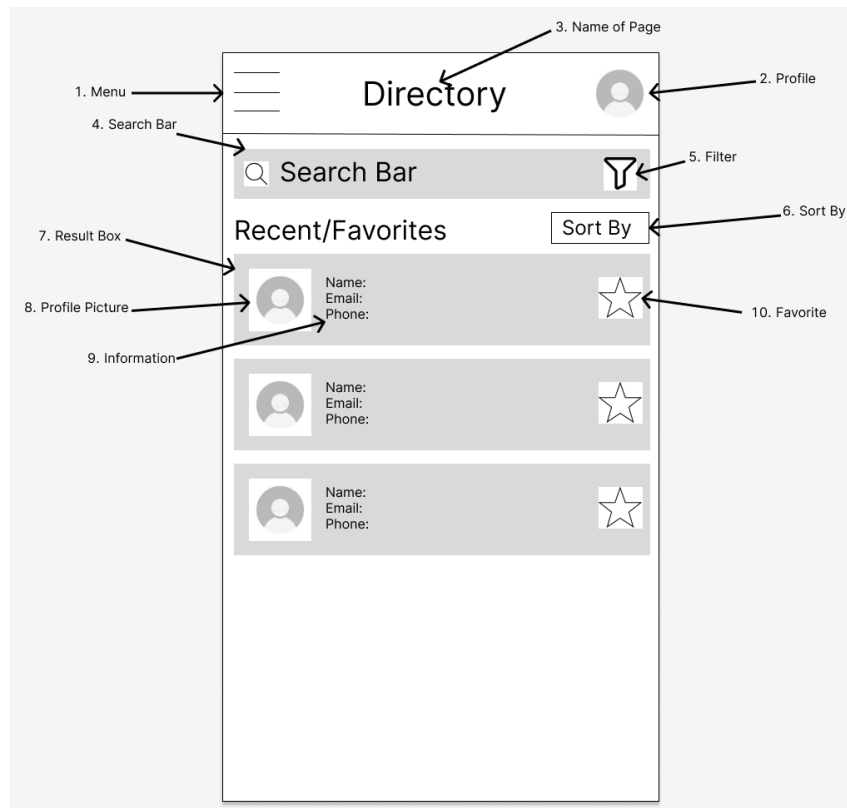


Figure 5 - Employee Directory

This screen will be where a user can search for a fellow employee by name and by using filters (5) to find that person's email, phone number, etc. Further, the user can also sort in different methods once they enter a name into the search bar to better filter their results and leave less to sift through. The user may also favorite people that they find themselves often returning to in order to grab their email, phone number, full name, etc.

1. Menu - Talked about in detail in the home figure (1).
2. Profile - Talked about in detail in the home figure (1).
3. Name of Page - This is the name of the page, which, in this case, is Directory.
4. Search Bar - This is where a user may enter something they want to search for other employee's by, such as a first name or even first and last name to narrow the search.
5. Filter - Used to filter the search results by level of authority (admin, system admin, building admin, etc.).
6. Sort By - After getting results, if necessary, the user may have different sort by options, such as alphabetically, reverse alphabetical, etc.
7. Result Box - All users that fit the search criteria will have their information show up in a box such as this. This box will contain all relevant information (9), a profile picture (8), and a favorite button (10).
8. Profile Picture - This shows the profile picture for the given employee for this result.
9. Information - Provides the employees information, such as name, email, and phone number.
10. Favorite - This can be used to favorite an employee so they are at the top of the list.

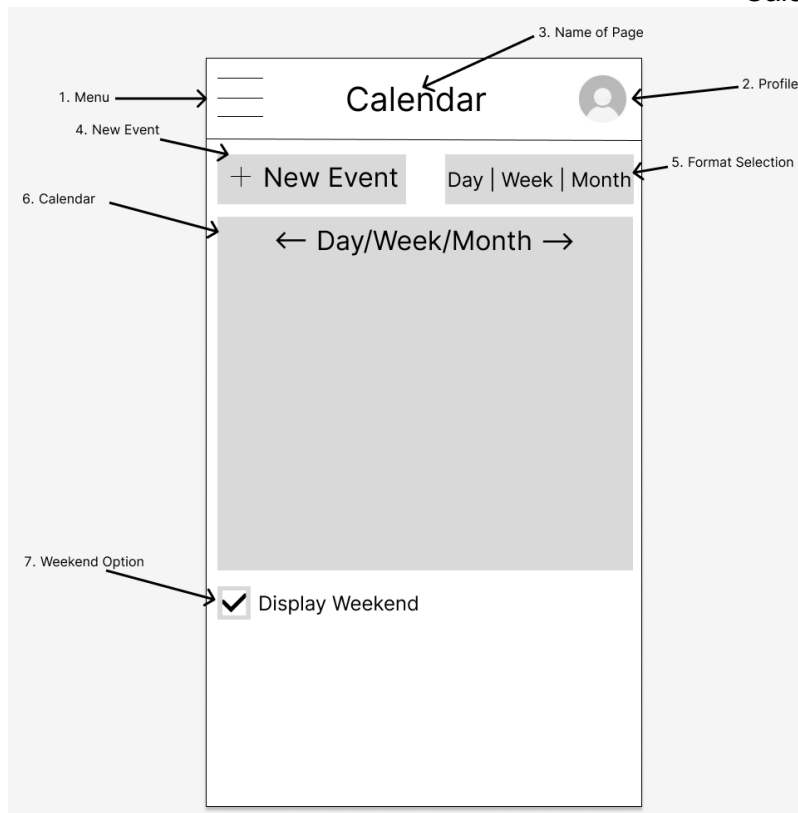


Figure 6 - Calendar

This screen is where employees can go to look at their calendar. With this, they will be able to see upcoming meetings, events, reminders, etc. Further, on this page, a user can create a new event, which can be a meeting, reminder, etc. They also may display in different formats if they want to see more details on a specific day/week or way to see the entire month (5).

1. Menu - Talked about in detail in the home figure (1)..
2. Profile - Talked about in detail in the home figure (1).
3. Name of Page - The name of the screen is displayed here, in this case Calendar.
4. New Event - Using this button, an employee can create a new event. This event will have a start/end time, a location (if applicable, unless online), a day/days assigned to it, and more. Reminders can also be created with this button.
5. Format Selection - Users can select if they want to display a certain day, a certain week, or a certain month with this selection.
6. Calendar - Here the user can see the calendar with the given selection (5). With this, they can use the arrow keys at the top to go between the given day/week/month, depending on their format selection (5). Further, reminders, meetings, etc. will show up here for the days and times they are set for.
7. Weekend Option - The user can choose to display the weekend, given they are on the week/month option, as with the day option this will not matter, as, depending on what is considered the work week, one may not want to display the weekend as it can cause unnecessary clutter. This is simply a check box.

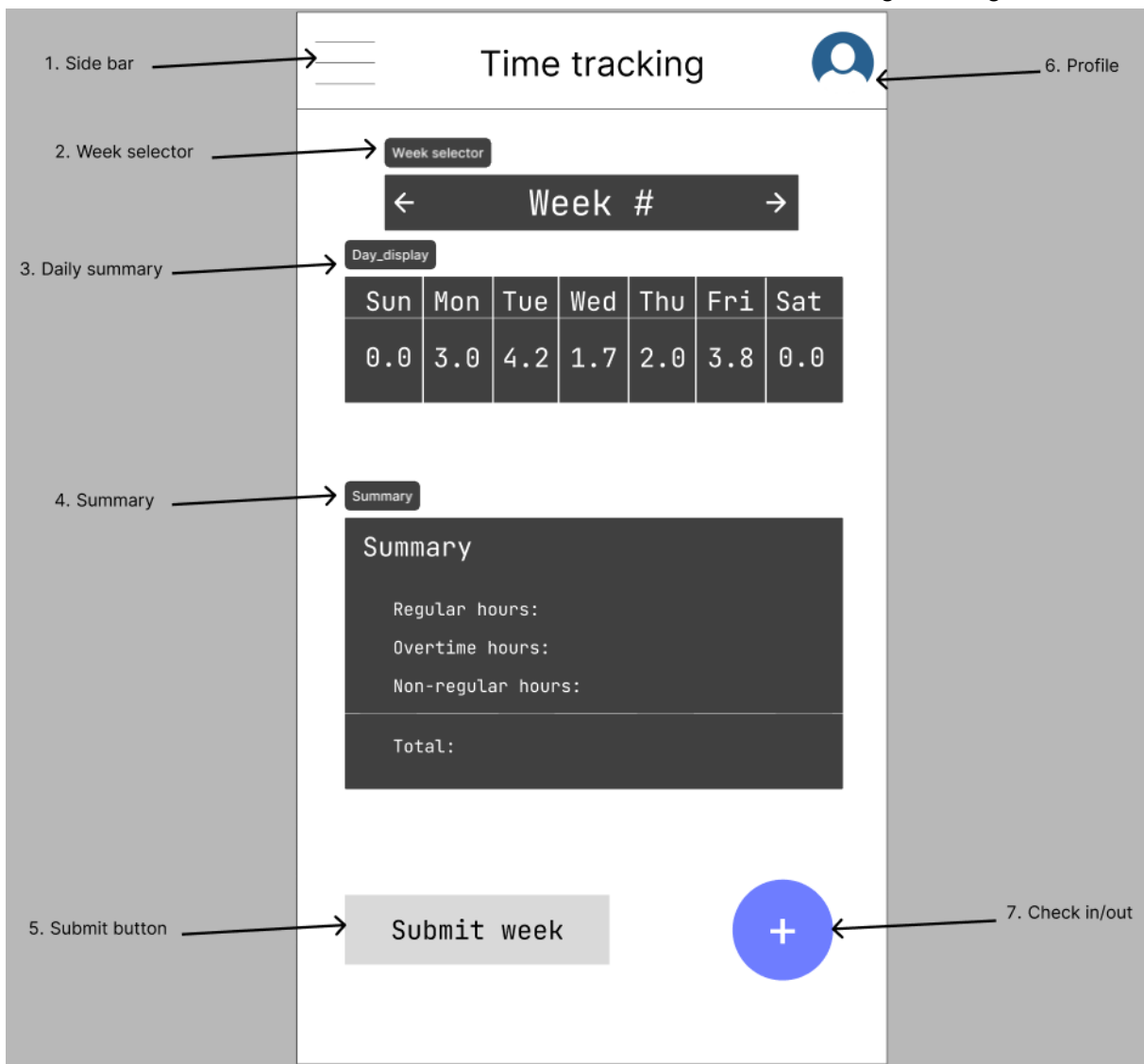


Figure 7 - Time Tracking

This screen will show the weekly and daily summary of the user's time, it also provides a button to add more hours and submit the total for the week.

1. The sidebar provides access to the other screens.
2. This section will allow users to navigate through the previous and next weeks.
3. This section provides the summary of each day for the specific week.
4. The summary section will show the hours.
5. This button submits the weekly hours, which are sent to their superiors.

1. Side bar

2. Name

3. ID

4. Email

5. Privileges

6. Birthday

7. Phone number

8. Department

8. Profile

Section 4

Name:

Section 5

ID:

Section 6

Email:

Section 7

Privileges:

Section 8

Birthday:

Section 9

Phone number:

Section 10

Department:

Section 11

Cancel

Section 12

Save

9. Cancel

10. Save

Figure 8 - New User

This screen provides a form that allows certain users to create new user accounts and add them to the employee directory.

- 2-8. This textbox and labels let the user know each attribute for the users.
- 9. Cancel button: this enables the user to cancel the user creation and go back to the home page.
- 10. Save button: this will save the user and clear every field.

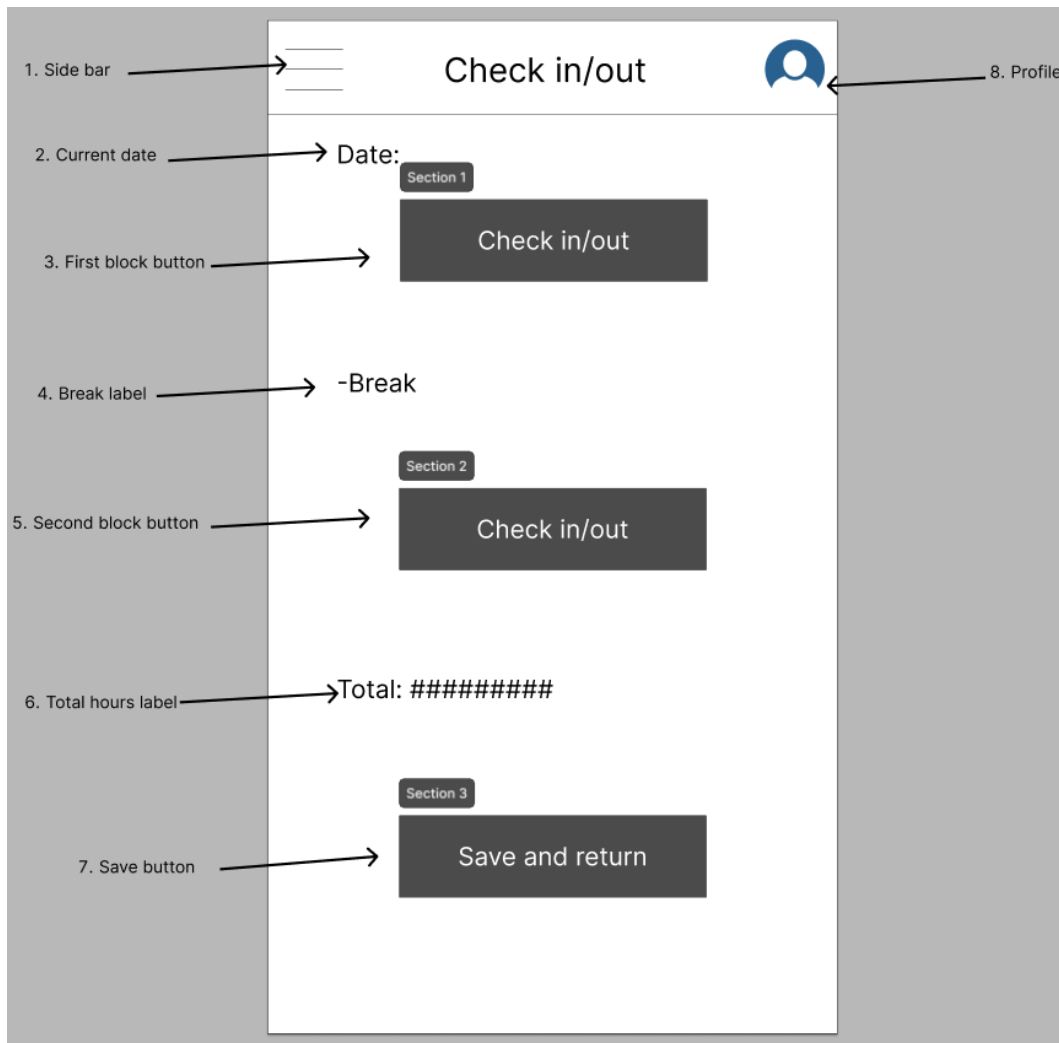


Figure 9 - Check In/Out

This screen will be one of the most important and used, this allows the user to report when they start working and when to take a break and start working again.

1. The sidebar provides access to the other screens.
2. This will show the current date and time.
3. This button will be available only at the beginning of the first shift and at the end. It will allow the user to start and stop the stopwatch for their first shift.
4. Break will allow the user to see if they are on a break. This will also be enabled only after the first shift ends.
5. This button will be available only at the beginning of the second shift and at the end. It will allow the user to start and stop the stopwatch for their second shift.
6. This label will be live-updated and will show the user the current time they have been working for the current day.
7. This button will save the user's actions and return to the time tracking page.