1. **Executive Summary (1 page):**

​​point system for completing tasks

* compare completion weekly
* light/dark mode
* color code
* switch between different views
* customizable time
* include parents, kids, teachers, etc.
* Celebratory animations (confetti burst/firework animation + fun sound effect)
* Progress bar or leveling up (visual progress bar or streak tracker / unlock badges or themes for calendar)
* Positive reinforcement messages
* Points system to unlock new themes, emojis, or customization options
* Daily accomplishment summary - at end of day show summary of everything user accomplished in a visually engaging way such as a celebratory graphic

Updated exec summary:

Managing daily tasks and schedules can be challenging for families, students, and professionals alike. Existing task management solutions often lack the flexibility and personalization required by different user groups, such as parents, kids, and teachers. Our product, TaskFlow, is designed to address these challenges by providing a comprehensive task management system that supports user accounts and offers customizable features for a more tailored experience.

TaskFlow allows users to create accounts, manage their schedules, and organize tasks in a way that fits their unique needs. With TaskFlow, users can easily switch between different views–such as daily, weekly, and monthly–to get a clear understanding of their upcoming tasks and deadlines. The platform also enables users to compare their task completion on a weekly basis, allowing for better tracking of productivity and progress over time.

One key feature of TaskFlow is the ability to **color-code tasks**, making it easier to visually organize and differentiate between tasks related to various categories, such as work, personal, or school. Users can also take advantage of the platform's **light/dark mode,** providing a more comfortable and personalized viewing experience for any time of day or environment.

Additionally, TaskFlow is designed to accommodate the needs of different users (e.g. kids, parents, professionals, etc.). For example, parents can create and assign tasks for their children, teachers can schedule assignments and track student progress, and students can organize their own tasks and deadlines. The platform also offers **customizable time settings**, allowing users to set deadlines and reminders based on their preferred time zones or specific time intervals, ensuring they never miss an important task.

By creating user accounts, TaskFlow ensures that each user’s tasks, preferences, and progress are securely stored and accessible across devices. This makes it easy for families and individuals to collaborate and stay organized, even when switching between devices like laptops, tablets, and smartphones.

A unique aspect of TaskFlow is its **point system**, which rewards users for completing tasks. This gamification feature encourages users to stay on track by awarding points for task completion, promoting a sense of accomplishment and motivating productivity. The point system can be used to measure progress over time, offering an engaging way for both students and professionals to track their productivity.

Our team consists of six dedicated computer science students who are passionate about delivering a task management solution that combines flexibility, ease of use, and personalization. We believe that TaskFlow provides an ideal platform for users looking to manage their tasks and schedules with more control and customization than is typically offered by other task management tools. With features like **color coding,** and the **ability to switch between light and dark modes,** TaskFlow delivers a user-friendly experience that caters to the diverse needs of parents, students, and professionals alike.

**Venture capital question:  
TaskFlow** addresses a gap in the market by providing highly flexible and personalized task management solutions tailored for families and educators. While many task management tools cater to individual professionals or teams, few offer a holistic solution that works equally well for parents managing family schedules, kids learning time management, and teachers coordinating classroom activities. TaskFlow’s user-friendly interface, combined with its focus on these key user groups, makes it an attractive option for wide-scale adoption in educational and family-oriented markets.

The platform’s simplicity and intuitive design lower the barrier to entry, making it appealing to a broad range of users, including those who may be less tech-savvy. Additionally, by offering premium features–such as advanced task management and collaboration tools–TaskFlow can generate revenue through a free-to-use business model with optional premium upgrades. The low operational cost of cloud-based storage and user account management further enhance profitability potential, making TaskFlow an attractive investment for venture capitalists.

**Unique Value Prop:**

What sets **TaskFlow** apart from existing task management platforms is its focus on multi-user functionality across different roles. Online tools such as Google Calendar or Asana, which focus primarily on professional use cases, TaskFlow brings the power of task management to families and educators. This makes it versatile enough to be used in both personal and professional settings. By offering **customizable views, color coding, a point-based reward system for task completion**, and **time flexibility**, it is highly adaptable to the specific needs of parents, students, and teachers. This flexibility, combined with its ease of use, positions TaskFlow as a unique solution that addresses a broader user base than traditional task management platforms.

Through a focus on accessibility, flexibility, and seamless multi-device functionality, TaskFlow is tailored to address the unique needs of its diverse user base (mentioned above). By catering to various roles, as stated before, TaskFlow is positioned to stand out in the market as a versatile tool, offering significant growth potential and strong appeal for long-term user engagement.

1. **User Story + Persona**

**Interviewer: Sanna Mohabbat**

**Persona:**

* **Name:** Henna Mohabbat
* **Age:** 26
* **Occupation:** Second-year medical student at Tuoro University, Vallejo
* **Location**: Vallejo, CA (living with other med students)
* **Bio:**
  + Henna is a second-year med student at Tuoro University. She is balancing a hectic schedule filled with classes, clinical rotations, research work, and attending medical conferences. Henna struggles to find time to de-stress but tries to visit her family in the East Bay every weekend to unwind. She is also involved in research projects that add another layer of responsibility to her already-packed schedule

**Goals/Needs:**

* Organize multiple academic, personal, and research-related tasks
* Prioritize assignments, deadlines, and conference dates
* Find time for family and self-care
* Manage her overwhelming schedule more efficiently
* Ensure deadlines for schoolwork and research papers are not missed

**Frustrations/Pain Points:**

* Struggles with task overload; difficult to manage overlapping deadlines and tasks
* Often feels stressed due to a lack of free time to unwind
* Hard to maintain a balance between academic life, research work, and personal time
* Needs a tool that adapts to her fast-paced and ever-changing schedule

**Technological Preferences:**

* Uses Google Calendar but finds it lacking in detailed task management
* Needs an app that can help her better prioritize her tasks
* Prefers tools that sync easily across devices for quick changes on the go

**Questions + Responses:**

1. **How do you currently organize your tasks?**

“I mostly use Google Calendar for big events and deadlines, but I tend to scribble notes and lists for smaller tasks on paper or my phone. It's not very organized”

1. **What are the pros and cons of your current method?**

“The pro is that it's easy to quickly jot things down. The downside is that sometimes I forget where I noted something or overlook a deadline, and managing both digital and paper tasks is overwhelming”

1. **What features would you like to see implemented in a task management tool?**

“I’d love a system that could prioritize my tasks automatically based on deadlines, importance, and urgency. Something that can remind me of tasks I haven’t completed yet, even if they are small, and a system that could adapt to my changing schedule would be amazing”

1. **How do overlapping deadlines affect your stress levels?**

“It's stressful because I often feel like I am falling behind, and it is hard to know what to focus on first when multiple things are due on or around the same time. I need a way to easily adjust priorities when something urgent comes up”

1. **How do you handle sudden changes to your schedule?**

“It's difficult. If I get a last-minute meeting or task, it throws everything off, and I then have to reshuffle everything manually. I wish I had a tool that could handle sudden changes without me having to replan everything myself”

1. **What's your biggest challenge with managing tasks across different areas of your life?**

“Trying to balance schoolwork, research, and personal life. I often have to compromise my personal time to meet academic deadlines, and it feels like my tasks are always piling up”

1. **How often do you review or update your task list?**

“I check my tasks multiple times a day, especially in the mornings, but I tend to forget smaller tasks that aren’t written down somewhere easily visible since I mainly rely on my Google Calendar”

1. **How do you feel about using a digital tool for all your tasks?**

“I like the idea as long as it is easy to use and can sync across all my devices. I just want something that helps me stay organized without adding extra work”

**User Story:**

* As a second-year med student, I want a task management app that helps me prioritize and track deadlines for classes, research, and conferences, so I can stay organized and avoid missing important events or deadlines.
* As a busy professional with limited free time, I want a tool that can quickly adjust when my schedule changes, so I don’t have to manually reorganize everything.
* As a student with overlapping deadlines, I want a system that automatically ranks my tasks by priority, so I know what to focus on first, reducing stress and ensuring important tasks aren’t missed.
* As someone who balances multiple aspects of life, I want a platform that allows me to track both big events and small daily tasks, so I can manage both personal and academic responsibilities efficiently.
* As a student frequently on the go, I want a task management tool that syncs across my devices, so I can make quick updates or check my tasks whether I am on my laptop or phone.

**Interviewer: Anisah Chowdhury**

* **Name:** Yara Jeries
* **Age:** 22
* **Occupation:** Master’s Student at Pomona
* **Location**: Upland, CA
* **Bio:**
  + Yara is a 1st year grad student at Cal Poly Pomona. She is currently pursuing her MBA. Her classes are very intense and filled with multiple projects that she needs to stay on top of. She also travels quite a bit so it’s important to keep up with her schedule so as to not miss any important deadlines.

**Goals/Needs:**

* Remember when to do the certain task

**Frustrations/Pain Points:**

* Doesn’t get reminded in time/gets reminded too early then it gets forgotten

**Technological Preferences:**

* Phone/laptop

**Questions + Responses:**

**1.How do you currently organize your tasks?**

“I currently use a physical calendar because it’s just easier than navigating to another app or website”

**2.What are the pros and cons of your current method?**

“Pros: I can write whatever, wherever, and visually I can see everything. Cons: I cannot get reminded and it's hard to organize all my tasks.”

**3.What features would you like to see implemented in a task management tool?**

“I want to see more vibrant colors to keep me organized. I also want reminders to be more consistent so it doesn’t slip my mind easily. There should be a social aspect as well that can keep users connected.”

**4.How do overlapping deadlines affect your stress levels?**

“Overlapping deadlines make it hard to focus on one thing and get it done. Usually I’ll just procrastinate everything until the last minute”

**5.How do you handle sudden changes to your schedule?**

“I handle them by brute force, I just do what comes at me and worry about the repercussions later.”

**Interviewer: Joshua Abrenica**

* **Name:** Aliya Salter
* **Age:** 22
* **Occupation:** Fifth Year Business Marketing Major at SFSU
* **Location**: San Francisco, CA
* **Bio:**
  + Aliya is a fifth-year business marketing major at SFSU. She currently works in three different departments as a student worker as a climbing wall instructor, outdoor resource center staff, and as a boathouse manager. She manages keeping up with 15 units of class and participates in the rotary club and in intramural soccer at SFSU.

**Goals/Needs:**

* Help organize my tasks and remind me of things

**Frustrations/Pain Points:**

* Forgetting to do certain tasks and managing which ones to do first

**Technological Preferences:**

* Mostly accessible through my iphone and macbook

**Questions + Responses:**

**1.How do you currently organize your tasks?**

“If someone tells me a date and time for events or I find out I have tasks to do, like to add the events/tasks on my google and apple calendar. I use both because my different family members use both of these platforms.”

**2.What are the pros and cons of your current method?**

“It gets repetitive that I try to manually sync both of my calendars that say the same thing for the most part, but yet my family members like using their own one.”

**3.What features would you like to see implemented in a task management tool?**

“I like graphics and checking things off when I complete them. Maybe a reward system somehow could be motivating in regards to instant gratification marking something complete on my task list.”

**4.How do overlapping deadlines affect your stress levels?**

“I prioritize my schedule and the things I do based on importance and urgency pretty well. So, the most challenging part sometimes is deciding which event/task is more important than the other, or figuring out if I can delay or delegate conflicting tasks to another person so I would say I manage conflicts in my schedule when they happen pretty efficiently.”

**5.How do you handle sudden changes to your schedule?**

“Depending on the severity of the change, if it's important I do tend to stress more than less important tasks being changed. I am pretty adaptable to my schedule but I do hate it when I accidentally overlap my schedule or things get changed and it requires my immediate attention.”

**6.What's your biggest challenge with managing tasks across different areas of your life?**

“Sometimes I forget to add an event or task and I’ll unknowingly overlap my schedule or miss things but I don’t know if that’s something technology can necessarily help with, more of my own human error and my bad memory.”

**7.How often do you review or update your task list?**

“I check my calendar in the morning to figure out what I need to do throughout the day, and make sure that I am prioritizing my most important and urgent tasks over others. I also tend to check my calendars pretty frequently throughout the day because I get anxious about making sure I am where I need to be at all times as I don’t want to miss anything.”

**8.How do you feel about using a digital tool for all your tasks?**

“It’s very useful because it allows me to access my calendar and schedule anywhere I go since it’s on my phone that I bring everywhere”

**Interviewer: Junyoung Kim**

* **Name:** Keshan DeSilva
* **Age:** 20
* **Occupation:** Third Year International Business Major at SFSU
* **Location**: San Francisco, CA (Lives in VCS)
* **Bio:**
  + Keshan is a third year international Business Major at SFSU, transferred from USF. He checks Canvas for school work almost everyday, and writes down a to-do list each day. He misses some of the events and due dates for his tasks, since he doesn’t always bring what he wrote down on the notebook and rely on his memory. It causes missing events and late/missing homework, which isn’t good for his grade. He wants something special and innovative ways to manage his work and he can check whenever he wants(easy access)

**Goals/Needs:**

* Special and innovative work management system

**Frustrations/Pain Points:**

* Misses and/or late a lot of events/homework.

**Technological Preferences:**

* He wants something he can easily access with his phone. He doesn’t care if it's a website or app. Easy access and easy to use.

**Questions + Responses:**

**1.How do you currently organize your tasks?**

“Check Canvas everyday and write down a to-do list in his notebook. I memorize them so I don’t have to bring my notebook, but I miss some assignments/events ”

**2.What are the pros and cons of your current method?**

“Pros : I don’t have to deal with a calendar app and bring a notebook and check it every single second.

Cons : I forget something sometimes.”

**3.What features would you like to see implemented in a task management tool?**

“Easy access and easy to add and remove schedules. Maybe some notification 30 mins to 1 hour before the event begin because I have to get ready”

**4.How do overlapping deadlines affect your stress levels?**

“It stresses me out a lot because finishing multiple assignments in one day is hard work and I fail to finish them all sometimes, then I have to prioritize certain assignments, which could end up sacrificing certain assignments.”

**5.How do you handle sudden changes to your schedule?**

“If there are two events I have to go, then I prioritize my family issue, then the second one is the relationship between me and the event host, and the last thing I consider is which one will give me more loss, including opportunity cost, by not participating. If it’s an assignment that I didn’t know, then I check the grade of two courses, and do the one with lower grade first because I want to make sure I don’t fail any class.”

**6.What's your biggest challenge with managing tasks across different areas of your life?**

“I forgot some of the assignments/events I have to do/go to.”

**7.How often do you review or update your task list?**

“I try to constantly review what I should do, and update my task list when there’s a change in my schedule and have my notebook next to me.”

**8.How do you feel about using a digital tool for all your tasks?**

“I’m not a big fan of using digital tool such as phone calendar, especially it’s not easy to use, but to not miss homework/events anymore, maybe it’s time to use digital tools.”

**Interviewer: Junyoung Kim**

* **Name:** Charlie de Selincourt
* **Age:** 19
* **Occupation:** Politic major student in University of Birmingham and exchange student in SFSU
* **Location**: San Francisco, CA (Lives in VCS)
* **Bio:**
  + Charlie is an exchange student from University of Birmingham, UK. He checks Canvas for school work everyday and writes down big assignments and events on his phone calendar(apple calendar, he uses iphone).

**Goals/Needs:**

* Want to add all the events on the calendar, even the small events.

**Frustrations/Pain Points:**

* Don’t want to add small repeating assignments one by one.

**Technological Preferences:**

* I want a function that can add the same assignment repeatedly during a certain period of time, like an alarm, but set duration(when to when).

**Questions + Responses:**

**1.How do you currently organize your tasks?**

“If someone tells me a date and time for events or I find out I have tasks to do, I add them on the calendar, but I don’t really add small ones, especially if it’s repetitive. I use an alarm but I don’t like that I can’t see them on my calendar.”

**2.What are the pros and cons of your current method?**

“Pros is I can easily check canvas and calendar. Cons is if I forget a small repeating assignment, even with alarms, I turn it in late.”

**3.What features would you like to see implemented in a task management tool?**

“Adding repetitive features. For example, I have a quiz every Thursday, and I take it at the same time everyday, and I want to add it to my calendar as “Every Thursday until mm/dd/yyyy” so I know what I do at what time.”

**4.How do overlapping deadlines affect your stress levels?**

“It stresses me out, but I try to keep calm and work on assignments step by step, but just work a bit faster. There’s nothing I can do besides keep working step by step at a similar pace. Going too fast will cause mistakes that can lead to messing up the work.”

**5.How do you handle sudden changes to your schedule?**

“I just add them on my calendar and as long as the place doesn’t matter, I just keep working on it and try to finish them both faster. If the place is different and it matters, I choose the one that’s more beneficial”

**6.What's your biggest challenge with managing tasks across different areas of your life?**

“Forgetting small assignments, I set an alarm. I ignore alarms sometimes. I just think I’ll do it after I finish it, but I forget after I finish what I was working on.”

**7.How often do you review or update your task list?**

“As soon as there’s new update in my schedule”

**8.How do you feel about using a digital tool for all your tasks?**

“I am using it, but I hope one app has all the functions so I don’t have to work on both alarm and calendar.”

**Interviewer: Zoe Long**

* **Name:** Ivy Yu
* **Age:** 43
* **Occupation:** Housewife
* **Location:** Fremont, CA
* **Bio:**
  + Ivy is currently a housewife with a 13-year-old and an 8-year-old child. Every day she need to pick up and drop off her kids, as well as arrange extracurricular activities.

**Goals/Needs:**

* Auto alarm setup
* Vice verse, when I set up alarm, also shows it in the calendar

**Frustrations/Pain Points:**

* Sometimes need to set an additional alarm to remind me

**Technological Preferences:**

* Bind the alarm clock to the calendar

**Questions + Responses:**

**1.How do you currently organize your tasks?**

I use Google Calendar to record my tasks, and alarm is a good tool to remind me of things.

**2.What are the pros and cons of your current method?**

Generally, Google Calendar is good to use and enough for me. The feature I use most often is the Email Invitation. Basically, people can invite you to tasks through email, making it easy to coordinate schedules with others, like my husband. And you can sync different email accounts, which is very helpful.

**3.What features would you like to see implemented in a task management tool?**

I always keep my iPhone on silent mode, so I can’t get sound notifications from the app. As a result, I must set a separate alarm to remind me of my tasks. If the app could automatically set an alarm for me whenever I add a task, there will be no need for double efforts.

**4.How do overlapping deadlines affect your stress levels?**

Overlapping deadlines have little impact on my stress levels. I approach my tasks by prioritizing them based on urgency and importance, so I always have a clear idea of what needs to be done first.

**5.How do you handle sudden changes to your schedule?**

Move other things around, according to the priority and other things I need to do. When unexpected event arises, I take some time to assess my tasks and determine which one can be rescheduled.

**6.What's your biggest challenge with managing tasks across different areas of your life?**

Everything needs to be adjusted according to the kids’ school schedule and activities, especially when planning any travel or personal development. I prioritize their commitments, as they often take precedence in my planning. This means that I need to regularly review their school calendar and extracurricular activities to find the best timing for other things.

**7.How often do you review or update your task list?**

On daily basis and whenever there is task to be updated.

**8.How do you feel about using a digital tool for all your tasks?**

It’s very convenient because the calendar also syncs with my app watch, so I can always be punctual for all the tasks.

**User Story:**

* As a mother of two, my calendar is closely tied to my kids’ activities. I need to keep track of pick-up times and frequently reschedule due to unexpected events. To stay organized, I not only rely on my calendar but also set alarms for important reminders, especially since I prefer my phone to be on silent mode. I wish my calendar could effectively link to my alarm clock, allowing me to streamline my reminders and avoid any duplication of efforts.

**3. Data Definitions**

1. **User**
   1. **Definition:** An individual who interacts with the TaskFlow platform.
   2. **Types:** Users can be categorized into different roles, such as:
      1. **Basic User:** Can create, manage, and track their own tasks and schedules
      2. **Admin User:** Has additional privileges, such as managing groups or assigning tasks to others
   3. **Usage:** users log into the system to access their personalized tasks and schedules, which syncs across devices
2. **Task**
   1. **Definition:** a single action item or event created by a user that needs to be completed or tracked
   2. **Attributes:** 
      1. **Title:** a brief description of the task
      2. **Due Date:** the deadline by which the task should be completed
      3. **Priority:** a classification that indicates the urgency or importance of the task (high, medium, low)
      4. **Status:** the current state of the task (e.g. In progress, completed, pending)
      5. **Category:** A label or grouping (e.g. work, personal, school) used to organize tasks
   3. **Usage:** users create tasks with the appropriate attributes, manage them over time, and mark them as completed when done
3. **Calendar View**
   1. **Definition:** A visual representation of a user’s tasks and events, organized by day, week, or month
   2. **Types:**
      1. **Daily View:** displays tasks scheduled for a single day
      2. **Weekly View:** shows tasks for an entire week
      3. **Monthly View:** Provides a high-level view of all tasks for the month
   3. **Usage:** Users can switch between different calendar views to see their tasks over specific periods of time
4. **Category**
   1. **Definition:** A label assigned to tasks that helps users organize and sort them based on context (e.g. work, personal, school)
   2. **Attributes:** 
      1. **Name:** The name of the category
      2. **Color Code:** A color associated with the category to visually differentiate it from others
   3. **Usage:** Categories allow users to group related tasks for easier tracking and organization
5. **Priority Level**
   1. **Definition:** A color-coded design to measure of how important or urgent a task is
   2. **Levels:**
      1. **High:** tasks that need immediate attention + critical deadlines
      2. **Medium:** moderate importance + urgency
      3. **Low:** less urgent + can be completed at a later time
   3. **Usage:** Users assign priority levels to tasks to help manage their workload and focus on what needs to be done first.
6. **Reminder**
   1. **Definition:** A notification or alert set by the user to be reminded of a task/deadline before it’s due
   2. **Attributes:** 
      1. **Reminder Time:** the time at which the user receives the reminder (e.g. 1 hr before, 1 day before, etc.)
      2. **Recurring Reminder:** Option to set repeating reminders for ongoing tasks
   3. **Usage:** Users set reminders to ensure they are notified of important tasks ahead of time, helping them stay on track
7. **Point System**
   1. **Definition:** A gamification feature that rewards users for completing tasks with points, which can be tracked for motivation + productivity
   2. **Attributes:**
      1. **Points Awarded:** the number of points earned per task, which may vary based on difficulty and/or priority level
      2. **Total Points:** The cumulative points a user has earned for completed tasks
   3. **Usage:** Users are awarded points when they complete tasks, motivating them to stay on top of their work and providing a sense of accomplishment
8. **User Account**
   1. **Definition:** A personalized account for each user, containing their login credentials and associated data (tasks, preferences, schedules)
   2. **Attributes:** 
      1. **Username:** a unique identifier for the user
      2. **Password:** a secure key to access the user’s account
      3. **Profile Settings:** Customizable options like light/dark mode, notification preferences, and time zones
   3. **Usage:** User accounts store individual data and allow users to securely log in, access, and manage their tasks across multiple devices
9. **Time Zone** 
   1. **Definition:** The specific geographic time setting associated with a user’s tasks and reminders
   2. **Attributes:**
      1. **User’s Local Time Zone:** the time zone where user is located or prefers their tasks to be managed
      2. **Event Time Zone:** time zones can be assigned to specific events or tasks when they take place in different locations
   3. **Usage:** Users set a default time zone for their tasks, and the system adjusts accordingly for accurate scheduling and reminders
10. **Task Status**
    1. **Definition:** The current condition or progress of a task
    2. **States:**
       1. **Pending:** the task is created but not started
       2. **In Progress:** task is currently being worked on
       3. **Completed:** task has been finished
       4. **Overdue:** task passed its due date without being completed/marked as completed
    3. **Usage:** Task statuses help users track the lifecycle of a task and understand what still needs to be done
11. **Color Scheme**
    1. **Definition:** An option for users to set a color scheme that they like. Can be light/dark/pastel/inverted mode
    2. **Attributes**
       1. **scheme\_id (Primary Key) -** A unique identifier for each color scheme.
       2. **name -** The name of the color scheme (e.g., Light, Dark, Pastel, Inverted).

**4. Functional Requirements**

1. Users can create their own profiles
2. Users can add/remove/modify their own tasks

**5. Non-Functional Requirements:**

1. MongoDB:  
   - 5 GB
2. Application has to adapt to being used on mobile devices and desktop devices
3. Keep requests count low to not hit free hosting limits in Vercel

**6. Competitive Analysis**

**7. High Level System Requirements**

* **Next.js Framework : Frontend/Backend**
* **MongoDB : Database**
* **Prisma : ORM**
* **NextAuth : User Authentication library for Next.js**
* **Frontend/Backend Hosted on : AWS**

**8. Team**

| **Team Member** | **Role** |
| --- | --- |
| Sanna Mohabbat | Frontend,Backend |
| Anisah Chowdhury | Backend |
| Josh Abrenica | Scrum Master/Github Master |
| Bisum Tiwana | Team Lead |
| Zoe Long | Frontend |
| Jun Kim | Backend |

9. Checklist:

* Team found a time slot to meet outside of class: **DONE**
* Scrum Master shares meeting minutes with everyone after each meeting: **DONE**
* Github Master chosen: **DONE**
* Everyone sets up their local development environment from the team’s git repo: **DONE**
* Team decided and agreed together on using the listed SW tools and deployment server: **DONE**
* Team ready and able to use the choose/front-end frameworks:
  + For each technology, the team decides who will lead the study of each technology and what will be the specific goal of the study within one month from the M1 announcement (9/23) [e.g. implement DB scheme for main data items by next two weeks.
    - **If list a detailed study plan (plus one extra point)**

Study Plan: Research

**We were each given topics to research, then we presented our findings to each other. Below are overviews along with relevant notes that we took individually.**

**Josh** - Typescript

* [Relevant work -](https://docs.google.com/document/d/1hfM4YfkeCqRNH0X5Ya87RgUJ-G5aZxv5L7QoF_W21pg/edit#heading=h.p0d94tc0emgi) [Typescript Info](https://docs.google.com/document/d/1hfM4YfkeCqRNH0X5Ya87RgUJ-G5aZxv5L7QoF_W21pg/edit#heading=h.p0d94tc0emgi)
* Similar to javascript but easier to read
* Utilizes type-safety: adds static typing with optimal type annotations to JavaScript and other features that help catch errors early in development
* Stronger type-checking means fewer runtime errors, which increases the reliability of your code
* Helps with the readability and maintainability of your project, especially in team settings
* Using TypeScript with Next.js ensures that your components are type-safe.
* We’ll likely have some API routes for fetching and updating tasks. We can use TypeScript to define request and response types, which helps ensure that the data returned from your MongoDB API matches what your frontend expects

**Sauna** - Prisma

* 2 important components
  + Schema - define data model
  + Prisma client - adding, updating, or deletes data
    - Has type safety
* Relevant Work:
  + <https://docs.google.com/document/d/1C0zynwRGY81YaKWnBZUl23s5MA3HvgjHE5-XjoqLDoU/edit?usp=sharing>

**Anisah** - Next.js & express

* Handles full stack development of applications
* For building web applications
* Helps loads pages faster
* Express is web framework that lets you build scalable web applications
  + Allows use of helpful middleware
* Relevant work: <https://docs.google.com/presentation/d/13cMWM-Ul-Nth9p8kmQskI8v1Uo0DCbsB3gYyr053RDg/edit?usp=sharing>

**Zoe** - Tailwind

* Open source css framework
* Utility first approach that is efficient for web development
* Can be easily customized through tailwind.config.ts
* A cheat sheet can be useful to combine CSS and Tailwind
* Relevant work:

<https://docs.google.com/document/d/1qDNLlPBeJ9w6_ilKrDzvm6iIOksDz9km70h1bGUiRf4/edit?usp=sharing>

**Bisum** - Git

* Git helps keep track of code and allows collaboration of code
* Github is remote repository
* Helps handle and manage projects easier

**Jun** - MongoDB & Typescript

* MongoDB
  + Relevant Work: <https://drive.google.com/drive/folders/1ZvxfKKlRHPY0Rp1WYIehEICuueW43wmA?usp=sharing>
* TypeScript
  + Relevant Work:

<https://docs.google.com/presentation/d/1BZLY6kYmRILw9QsEAQtfEzpIWO8MMNOPrTgEE3ofQ5w/edit?usp=sharing>