Product Requirements

Assistive Task App

Team JJaCL

Brief problem statement

This should be 1-2 paragraphs describing what the motivation is for the project. What is the problem to be solved?

Individuals with and without disabilities may struggle to find task management tools that are both accessible and have features that support their unique needs. Given that most existing tools on the market today are locked behind paywalls or rely on subscription-based models, they're not really accessible. These tools are often copy-paste of each other, barely providing any thoughtfully designed feature (that's not paywalled). We are motivated to create a customizable and accessible assistive task management app that can empower as many types of users as possible.

System Requirements

What system configuration needs to run your proposed system (including anything third party that is needed to run your system).

A modern web browser that supports HTML5, CSS3, and JavaScript ES6+ are needed for the system to run. Possible browsers are Google Chrome, Mozilla Firefox, Microsoft Edge, and Safari. Note, these browsers need to be running the latest version of themselves. This is to ensure that the browsers are able to support IndexedDB and localStorage, which is what we will be using for data storage. Browsers also need to support Service Workers (for offline support and caching) and Web Manifest (for progressive web app development) in order for the system to work as intended. Any device that can run these browsers should be able to run our web app.

The web application will be initially hosted using GitHub Pages. For the initial download, users will need a GitHub account and internet connection. In the future, we will expand our downloading options to other web hosting services that do not require users to create an account.

We expect to use third-party dependencies such as React.js and Node.js for frontend framework and app deployment, respectively. Other possible software that need to work in tandem with our web app are screen readers available on the user's OS and devices that should have microphone access (for voice command support).

Users Profile

Who is the system intended for? What characteristics should the users have (this can also be a range of things such as reading level, etc.).

The system is intended for individuals with disabilities who may have challenges relating to task management and executive functioning. It is designed with accessibility at its core, but can be beneficial for neurotypical users who are looking for a structured task management tool.

- Neurodivergent individuals will have tools to help break down tasks, maintain routines, and minimize distractions.
- Individuals with visual impairments will have screen reader support, voice commands, and customizable theme settings.
- Individuals with limited mobility will be able to use "gestures" and voice commands to navigate through the app.
- Neurotypical individuals will have a simple tool for productivity, stress management, and routine creation.

We aim to keep the text at a grade 5-8 reading level (clear and plain), ensuring comprehension across a wider range of cognitive abilities. Those who are less tech-savvy will have an onboarding walkthrough, while tech-savvy individuals can skip the onboarding.

List of Features

Provide a numbered list of features (F1, F2, etc.) that concisely, clearly, and accurately describe that which constitutes your project.

No.	Feature Name	Description
F1	Task Creation	Baseline, users are able to create and check-off tasks
F2	Routine Creation	Routines are a group of tasks that appear consistently

		throughout the user's life.
F3	Focus Mode	Inspired by the pomodoro-timer, which is often used for studying and completing tasks. The app will become a visual/auditory countdown timer with a tasklist on the side.
F4	Assist Task Breakdown	Provides suggestions and/or prompts to help users break complex tasks into smaller, manageable steps.
F5	Visibility Accessibility	High-Contrast; Color-Blindness; Dark Mode
F6	Font Customization	Allows users to adjust font-size and type to enhance readability (useful for users with Dyslexia)
F7	Screen Reader	To aid visually impaired users
F8	Voice Command	Ability to navigate and manage tasks with voice commands from the user
F9	Quick/Simple Gestures	Enables intuitive swipe and tap gestures for mobile users that may have limited mobility
F10	Mood Tracker	Users can log how certain tasks/routines make them feel, helping in identifying those that causes stress or satisfaction

Functional Requirements (user stories)

List the Priority as 1 (High Priority - Critical) to 3 (Low Priority – Would be nice if we have time)

No.	Feature Name	Description	Priority
R1	Task Creation	As a user, I want to create tasks and check them off when completed, so I can track what I have accomplished	1
R2	Routine Creation	As a user, I want to group tasks into routines that reoccur, so I can manage responsibilities efficiently	1
R3	Focus Mode	As a user, I want a "Focus Mode" with a countdown timer with visible task, so I can stay productive and on-task using a Pomodoro system	2
R4	Assist Task Breakdown	As a user, I want the app to suggest how to break larger tasks into smaller steps	2

R5	Visibility Accessibility	As a user with visual needs, I want to enable high-contrast, dark mode, and/or color-blind-friendly options	1
R6	Font Customization	As a user, I want to customize font size and type to improve readability, especially if I have dyslexia or other reading disabilities	2
R7	Screen Reader Support	As a visually impaired user, I want the app to be fully compatible with screen readers, so I can easily use the app	1
R8	Voice Command	As a user, I want to use voice commands to create and manage tasks, so I can operate the app hands-free	2
R9	Quick/Simple Gestures	As a user with limited mobility, I want to use simple tap and swipe gestures to navigate the app, so I can interact with it more easily	2
R1 0	Mood Tracker	As a user, I want to log how tasks and routines affect my mood, so I can identify what causes stress or satisfaction	3

Non-Functional Requirements

Describe any constraints or cross-cutting characteristics of the system in a manner that is clear, specific, and testable. Each requirement should have a unique identifier (e.g. NF1, NF2,..). Only present those which are applicable to your system. Categories include but are not limited to:

Security

Reliability

Usability

Cross-Platform Compatibility

Accuracy

No.	Category	Description
NF1	Usability	The system will have an intuitive and minimalistic UI that allows new users to do their first task creation within 2 minutes of opening the app
NF2	Accessibility	The system will support accessibility features including screen reader compatibility, voice commands, and

		color-blind-friendly themes, therefore complying with WCAG 2.1 Level AA standards
NF3	Reliability	
NF4	Performance	The app will function consistently on modern web browsers (Chrome, Firefox, and Safari)
NF5	Cross-Platform	
NF6	Security	
NF7	Data Privacy	The system will not share or sell user data to third parties, therefore complying with GDPR and CCPA regulations
NF8	Accuracy	Focus timer and scheduling component will operation with no more than 1 second deviation, given a 25 minute cycle

Sponsor Requirements

I have read and approved the material in this document. If there is no external sponsor, the TA or instructor will sign it for accuracy/scope.

_____   _____   _____

Print Name							Signature							Date