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Team 6

Sprint 1 Planning Document

22nd February 2021



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Sprint Overview

By the end of this sprint, our team intends to have basic functionality of the web app and mobile app implemented. We have selected 16 user stories which will focus on the following tasks: this includes logging in, creating an account, sending error messages if credentials are wrong/duplicated, setting up the dashboard, creating the static "Workout Editor" page, and saving credentials through smart ID login. We will link all our components of the cross-platform application by using Bootstrap for the frontend implementation for the web app, React Native for the mobile app, and Node.js and MongoDB for the backend implementation. Some tasks will also require future modification for future sprints when implementing the main workout features of this app.

Scrum Master: Dithi Saxena

Meeting Schedule: Tuesdays/Thursdays | 8 PM EST | Zoom

Sundays | 10 AM EST | Zoom

Additional meetings as necessary

Risks and Challenges:

While we have a well-planned sprint with clear objectives, we are expecting some challenges.

First, this is the first time our team is working together. Because of this, it is likely we are going to have disagreements on how to handle issues when they arise. It will likely take our team time to get used to how everyone works.

Second, many of us on the team have not had previous experience working with the technologies we have decided for our application (React Native, Bootstrap, MongoDB, Node.js). This may cause us to experience unwanted delays to our schedule. To combat this issue, we will all need to study the languages/technologies we will be working with in advance to meetings.

Lastly, we expect to have a challenge linking our web application and mobile application. For this reason, it is essential that our team have good communication and documentation of our code so it makes sure that the synchronization of the two platforms goes smoothly.

Current Sprint Detail

User Story #1

As a user, I would like to be able to easily access the Werk It landing page.

| # | Description | Estimated Time | Owner |
|---|--|-----------------------|----------|
| 1 | Design UI for Werk It main landing page | 3 hrs | Abhishek |
| 2 | Implement UI for Werk It main landing page | 5 hrs | Abhishek |
| 3 | Debug and Test UI for landing page | 2 hrs | Abhishek |
| | Total Hours | 10 hr | 'S |

- Given that a user visits the *Werk It* landing page on the web, when they click the sign up button in the navbar, then the account creation page should be displayed.
- Given that a user visits the *Werk It* landing page on the web, when they click the login button in the navbar, then the login page should be displayed.
- Given that a user visits the *Werk It* landing page on the web, when they click either the about link in the navbar or the learn more button in the jumbotron, then the about section in the webpage should be displayed.
- Given that a user visits the *Werk It* landing page on the web, when they click the features link in the navbar, then the features section in the webpage should be displayed.
- Given that a user visits the *Werk It* landing page on the web, when they click the exercise link in the navbar, then the exercise section describing how they can enter their workout data on the mobile app should be displayed.

As a user, I would like to be able to register for a Werk It account on the web app.

| # | Description | Estimated Time | Owner |
|---|---|----------------|----------|
| 1 | Design UI for the Create Account page | 2 hrs | Abhishek |
| 2 | Implement UI for the Create Account page | 3 hrs | Abhishek |
| 3 | Create an icon that allows the user to return to the landing page when clicked. | 0.5 hr | Abhishek |
| 4 | Setup the Node.js backend to receive the data collected from the frontend input form fields | 2 hrs | Katy |
| 5 | Implement the necessary backend functionality required to correctly conduct account creation | 2 hrs | Katy |
| 6 | Design and create a MongoDB cluster to store the user information. | 3 hrs | Dithi |
| 7 | Securely store the information process by the backend on the newly created MongoDB cluster | 2 hrs | Dithi |
| 8 | Create Unit Tests to test the backend functionality for creating an account | 3 hrs | Dithi |
| 9 | Debug and test frontend component of account creation and its accessibility from the landing page | 1 hr | Abhishek |
| | Total Hours | 18.5 h | rs |

- Given that a user visits the *Werk It* landing page on the web, when they click the sign up button in the navbar, then the account creation page should be displayed.
- Given that a user fills out all the required fields accurately, when they click the sign up button, then their credentials will appear exactly as intended within the MongoDB database cluster.
- Given that there are no error messages, when they click the sign up button, then the user will be redirected to a blank page stating the message "Welcome [User's Firstname] [User's Lastname]" and prompting them to download the *Werk It* mobile app.

As a user, I would like to be able to login to my Werk It account on the web app.

| # | Description | Estimated Time | Owner |
|---|---|-----------------------|----------|
| 1 | Design UI for the Login page | 2 hrs | Abhishek |
| 2 | Implement UI for the Login page | 3 hrs | Abhishek |
| 3 | Create an icon that allows the user to return to the landing page when clicked. | 0.5 hr | Abhishek |
| 4 | Setup the Node.js backend to receive the data collected from the frontend input form fields | 3 hrs | Katy |
| 5 | Implement Authorization handling in the backend to validate the User's login credentials. | 2 hrs | Katy |
| 6 | Design and create a backend route for logging in | 3 hrs | Dithi |
| 7 | Debug and Test the backend route for logging in | 2 hrs | Dithi |
| 8 | Debug and test frontend component of the login page and its accessibility from the landing page | 1 hr | Abhishek |
| | Total Hours | 16.5 h | irs |

- Given that a user visits the *Werk It* landing page on the web, when they click the login button in the navbar, then the login page should be displayed.
- Given that a user fills out all the required fields accurately, when they click the login button, then the backend route will accurately identify the respective user.
- Given that there are no error messages, when they click the sign in button, then the user will be redirected to a blank page stating the message "You have successfully Logged In."

As a developer, I need to display an error message if at least one of the user's credentials already exist in the database when creating an account.

| # | Description | Estimated Time | Owner |
|---|--|-----------------------|-------|
| 1 | Notify the requesting client (web or the mobile) if the username that is entered on the sign up page by the user already exists within the database. | 2 hrs | Dithi |
| 2 | Display the appropriate UI error or alert for the mobile app when receiving the notification from the database. | 2 hrs | Vivek |
| 3 | Display the appropriate UI error or alert for the web app when receiving the notification from the database. | 1 hr | Abhi |
| | Total Hours | 5 hrs | 5 |

- Given that the username entered already exists within the database, when the user clicks the sign up button, then a red alert message will be displayed in the sign up page, indicating "The username entered already exists. Please choose a different one."
- Given that the user already exists in the database, when a user tries to make a new account with an existing profile, then notify the requesting client.
- Given that a username already exists in the database, when the user tries to sign up for a new account with a pre existing username, then a new account will not be created.

As a developer, I need to display an error message if at least one of the user's credentials is incorrect.

| # | Description | Estimated Time | Owner |
|---|---|-----------------------|-------|
| 1 | Notify the requesting client (web or the mobile) if the username entered by the user in the login page does not exist within the database | 2 hrs | Katy |
| 2 | Notify the requesting client (web or the mobile) if the password entered by the user in the login page does not exist within the database | 2 hrs | Katy |
| 3 | Notify the requesting client (web or the mobile) if the password entered by the user in the login page does not match with the username typed by the user | 2 hrs | Katy |
| 4 | Display the appropriate UI error or alert for the mobile app when receiving the notification from the database. | 2 hrs | Vivek |
| 5 | Display the appropriate UI error or alert for the web app when receiving the notification from the database. | 1 hr | Abhi |
| | Total Hours | 9 hrs | S |

- Given that the user enters a nonexistent username, when the user clicks the login button, then an error alert should show up on the respective client (web or mobile) being used to log in and the user will not be logged in.
- Given that the user enters a nonexistent password when logging in, when the user clicks
 the login button, then an error alert should show up on the respective client (web or
 mobile) being used to log in and the user will not be logged in.
- Given that the user enters a password that does not match the username when logging in, when the user clicks the login button, then an error alert should show up on the respective client (web or mobile) being used to log in and the user will not be logged in.

As a user, I would like my password to be reset if I forget it.

| # | Description | Estimated Time | Owner |
|----|---|-----------------------|----------|
| 1 | Design UI for the Reset Password page for the Web app | 2 hrs | Abhishek |
| 2 | Implement UI for the Reset Password page for the Web app | 3 hrs | Abhishek |
| 3 | Design UI for the Reset Password screen for the mobile app | 2 hrs | Chris |
| 4 | Implement UI for the Reset Password screen for the mobile app | 3 hrs | Chris |
| 5 | Setup the Node.js backend to receive the data collected from the frontend input form fields | 3 hrs | Katy |
| 6 | Implement Authorization handling in the backend to validate the User's email address | 2 hrs | Katy |
| 7 | Design and create a backend route for resetting password | 3 hrs | Dithi |
| 8 | Debug and Test the backend route for resetting password | 2 hrs | Dithi |
| 9 | Debug and test frontend component of the reset password page and its accessibility from the landing page | 1 hr | Abhishek |
| 10 | Debug and test frontend component of the rest password page and its accessibility from the mobile signup screen | 1 hr | Chris |
| | Total Hours | 22 hı | 'S |

- Given that a user visits the login page, when they click the reset password button, then they will be able to access the reset password page.
- Given that a user fills out the required fields accurately, when they click the reset password button, then the backend route will accurately identify the respective user.

- Given that there are no error messages, when they click the reset password button, then
 the user will be redirected to a new password page that prompts the user for a new
 password.
- Given that the password was correctly updated in the database, when the backend route is successfully setup, then the user will be redirected to a blank page stating the message "Your password has been successfully reset."

As a user, I would like the ability to change my username.

| # | Description | Estimated Time | Owner |
|---|---|-----------------------|----------|
| 1 | Design UI for the Change Username page | 2 hrs | Abhishek |
| 2 | Implement UI for the Change Username page | 3 hrs | Abhishek |
| 3 | Design UI for the Change Username screen for the mobile app | 2 hr | Chris |
| 4 | Implement UI for the Change Username screen for the mobile app | 3 hr | Chris |
| 5 | Setup the Node.js backend to receive the data collected from the frontend input form fields | 3 hrs | Katy |
| 6 | Implement Authorization handling in the backend to validate the User's email address | 2 hrs | Katy |
| 7 | Design and create a backend route for changing username | 3 hrs | Dithi |
| 8 | Debug and Test the backend route for changing username | 2 hrs | Dithi |
| | Total Hours | 20 hi | 'S |

- Given that a user visits the reset password page, when they click the change username button, then they will be able to access the change username page.
- Given that a user fills out the required fields accurately, when they click the change username button, then the backend route will accurately identify the respective user.
- Given that there are no error messages, when they click the change username button, then the user will be redirected to a "create new username" page that prompts the user for a new username.
- Given that the same username did not exist previously in the database and was correctly
 updated in the database, when the backend route is successfully setup, then the user will
 be redirected to a blank page stating the message "Your username has been successfully
 reset."

As a developer, I need to display a loading symbol if requests take longer than a second so that the user does not think the app has frozen.

| # | Description | Estimated Time | Owner |
|---|--|-----------------------|-------|
| 1 | Design loading symbol UI for web app if requests to the server take longer than one second. | 3 hrs | Vivek |
| 2 | Design loading symbol UI for mobile app if requests to the server take longer than one second. | 3 hrs | Vivek |
| | Total Hours | 6 hrs | 5 |

- Given that the elapsed time since the button click is 1 second and no response has been received, the loading symbol will appear.
- Given that the loading symbol appears when the client is waiting for a response, then the loading symbol should be indicative of status (e.g. sending request, receiving request, etc.)
- Given that the loading symbol appears when there is an error with the request, then the loading symbol should indicate the error (e.g. network connectivity, etc.)

As a user, I would like to be able to set my profile picture.

| # | Description | Estimated Time | |
|---|--|-----------------------|-------|
| 1 | Add profile pic feature on the web app. | 6 hrs | Vivek |
| 2 | Add profile pic feature on the mobile app. | 6 hrs | Vivek |
| | Total Hours | 12 hr | 'S |

- Given that the user clicks "choose profile picture" when on the profile page, then the user can choose to set a profile picture.
- Given that the user chooses to set a profile picture when they click "choose profile picture", then the user can upload a pre-existing photo.
- Given that the user sets a profile picture, when they are on the profile page then it will be displayed at the top of the page.
- Given that the user sets a profile picture, when they are on the dashboard page then it will be displayed in the top corner of the page.

As a user, I would like my device to remember me until the next time I log out on the mobile app.

| # | Description | Estimated Time | Owner |
|---|--|-----------------------|-------|
| 1 | Create a token corresponding to the login credentials that persists even when the app is closed. | 2 hrs | Vivek |
| 2 | Access the token when the user boots up the mobile app to automatically log in. | 2 hrs | Vivek |
| | Total Hours | 4 hrs | 5 |

- Given a user has never signed into their mobile app before, when they sign into the app and select the "Keep me signed in" option, then create a token in AsyncStorage that holds the user's login credentials.
- Given a user has signed into their mobile app before and selected the "Keep me signed in" option, when they open the mobile app, then use the token to log in without user action.
- Given a user has a login token created for their mobile app, when the user chooses to sign out, then delete the corresponding login token from AsyncStorage.

As a user, I would like to be able to sign up on the mobile app.

| # | Description | Estimated Time | Owner |
|---|---|-----------------------|-------|
| 1 | Design UI for the Create Account screen for the mobile app | 2 hrs | Chris |
| 2 | Implement UI for the Create Account screen for the mobile app | 3 hrs | Chris |
| 3 | Configure backend to receive requests from mobile app to create account | 3 hrs | Katy |
| | Total Hours | 8 hrs | S |

- Given that a user has never used the application before, when they open the mobile app and tap the "Sign Up" button, then they should be prompted with the Create Account screen.
- Given that a user fills out all the required fields accurately, when they tap the sign up button, then their credentials will appear exactly as intended within the MongoDB database cluster.
- Given that there are no error messages, when they tap the sign up button, then the user will be redirected to a blank dashboard stating the message "Welcome [User's Firstname] [User's Lastname]" and prompting them to get started by creating a new workout.

As a user, I would like to be able to login to my Werk It account on the mobile app.

| # | Description | Estimated Time | Owner |
|---|---|-----------------------|-------|
| 1 | Design UI for the Login screen for the mobile app | 2 hrs | Chris |
| 2 | Implement UI for the Login screen for the mobile app | 3 hrs | Chris |
| 3 | Set up the Node.js backend to receive the data collected from the frontend input form fields | 3 hrs | Katy |
| 4 | Implement Authorization handling in the backend to validate the User's login credentials | 2 hrs | Katy |
| 5 | Design and create a backend route for logging in | 3 hrs | Dithi |
| 6 | Debug and test the backend route for logging in | 2 hrs | Dithi |
| 7 | Debug and test frontend component for the login page and its accessibility from the landing page. | 1 hr | Chris |
| | Total Hours | 16 hr | 'S |

- Given that a user has not logged in before, when they open the mobile app, then the login page should be displayed.
- Given that a user fills out all the required fields accurately, when they tap the login button, then the backend route will accurately identify the respective user.
- Given that there are no error messages, when they click the sign in button, then the user will be redirected to a blank page stating the message "You have successfully Logged In."

As a user, I would like to be able to easily navigate the dashboard of the mobile app.

| # | Description | Estimated Time | Owner |
|-------------------|---|-----------------------|-------|
| 1 | Design UI for the dashboard of the mobile app | 2 hrs | Chris |
| 2 | Implement UI for the dashboard of the mobile app | 3 hrs | Chris |
| 3 | Debug and test UI for the dashboard of the mobile app | 2 hrs | Chris |
| Total Hours 7 hrs | | 5 | |

- Given a user has an account, when they login to the mobile app, then the dashboard screen should be displayed.
- Given a user is logged in, when they view the dashboard screen, then they should see the workouts that they have previously done.
- Given a user is on the dashboard screen, when they interact with any of the workouts they see on the screen, then the app should display the workout editor screen.

As a user, I would like to be able to easily access the workout editor screen on the mobile app.

| # | Description | Estimated Time | Owner |
|-------------------|---|-----------------------|-------|
| 1 | Design UI for the workout editor screen for the mobile app | 2 hrs | Chris |
| 2 | Implement UI for the workout editor screen for the mobile app | 3 hrs | Chris |
| Total Hours 5 hrs | | 5 | |

- Given that a user is on the mobile dashboard screen, when they tap the button to create a new workout, then the mobile app should display the workout editor screen.
- Given that the user is on the workout editor screen, when they tap the submit button, then the mobile app should return to the dashboard screen.
- Given that the user is on the workout editor screen, when they try to edit their workout, then the relevant fields will respond to their taps and input.

As a user, I would like to have face ID login once my credentials are saved.

| # | Description | Estimated Time | Owner |
|---|--|-----------------------|-------|
| 1 | Check whether device is capable of supporting face ID login | 3 hrs | Vivek |
| 2 | Create key in Info.plist file | 4 hrs | Vivek |
| 3 | Implement authentication handling in the backend to validate face ID login | 2 hrs | Dithi |
| | Total Hours | 10 hi | rs . |

- Given that the user is on the login page when they open the mobile app, then the mobile client will start listening for a face ID input.
- Given that a user provides the correct face ID when they login, then the backend route
 will accurately identify the respective user and automatically fill in the username and
 password indicating the face ID worked.
- Given that there are no error messages, when the user uses face ID to login, then the
 user will be redirected to a blank page stating the message "You have successfully
 Logged In."

As a user, I would like to have touch ID login once my credentials are saved.

| # | Description | Estimated Time | Owner |
|---|---|-----------------------|-------|
| 1 | Check whether device is capable of supporting touch ID login | 3 hrs | Vivek |
| 2 | Create string written in code for touch ID | 4 hrs | Vivek |
| 3 | Implement authentication handling in the backend to validate touch ID login | 2 hrs | Dithi |
| | Total Hours | 10 hi | 's |

- Given that the user is on the login page when they open the mobile app, then the mobile client will start listening for a touch ID input.
- Given that a user provides the correct touch ID when they login, then the backend route
 will accurately identify the respective user and automatically fill in the username and
 password indicating the touch ID worked.
- Given that there are no error messages, when the user uses touch ID to login, then the
 user will be redirected to a blank page stating the message "You have successfully
 Logged In."

Individual Team Member Hour Totals

| Team Member | Total Hours |
|--------------------|-------------|
| Dithi Saxena | 34 hrs |
| Katy Penquite | 33 hrs |
| Abhishek Gunasekar | 36 hrs |
| Christopher Yu | 34 hrs |
| Vivek Nair | 40 hrs |

Remaining Backlog

Functional

| # | User Stories |
|----|--|
| 1 | As a user, I would like to be able to easily access the Werk It landing page. |
| 2 | As a user, I would like to be able to register for a Werk It account on the web app. |
| 3 | As a user, I would like to be able to login to my Werk It account on the web app. |
| 4 | As a user, I would like to be able to sign up on the mobile app. |
| 5 | As a user, I would like to be able to login to my Werk It account on the mobile app. |
| 6 | As a user, I would like to have face ID login once my credentials are saved. |
| 7 | As a user, I would like to have touch ID login once my credentials are saved. |
| 8 | As a developer, I need to display an error message if at least one of the user's credentials already exist in the database when creating an account. |
| 9 | As a developer, I need to display an error message if at least one of the user's credentials is incorrect. |
| 10 | As a user, I would like my password to be reset if I forget it. |
| 11 | As a user, I would like the ability to change my username. |
| 12 | As a user, I would like to be able to view my app history on the web app. |
| 13 | As a user, I would like to be able to set my profile picture. |
| 14 | As a user, I would like to see a motivational quote whenever I access the app. |
| 15 | As a user, I would like to be able to easily navigate the dashboard of the mobile app. |
| 16 | As a user, I would like to be able to easily access the Create New Workout screen on the mobile app. |
| 17 | As a user, I would like to receive workout suggestions based on my activity. |
| 18 | As a user, I would like to be able to select the type of workout I plan to do (lifting, running, swimming, etc.). |
| 19 | As a user, I would like to be able to select individual types of lifts. |

| 20 | As a user, I would like to be able to create a new type of lift if it does not already exist. |
|----|--|
| 21 | As a user, I would like to be able to input the number of sets I did for each type of lift. |
| 22 | As a user, I would like to be able to input the weight I did per set of each type of lift. |
| 23 | As a user, I would like to be able to set the duration of my run. |
| 24 | As a user, I would like to be able to set the speed for my run. |
| 25 | As a user, I would like to be able to set the number of laps for my swim. |
| 26 | As a user, I would like to be able to set a custom type of workout. |
| 27 | As a user, I would like to be able to set the exercises for my personalized workout. |
| 28 | As a user, I would like the option to choose set/reps/weight for my custom workout. |
| 29 | As a user, I would like to be able to easily comprehend the visualizations generated based on my workout statistics. |
| 30 | As a user, I would like to see my workout time per week on a histogram. |
| 31 | As a user, I would like to see a line graph comparing my workout time with my friends. |
| 32 | As a user, I would like to see a progress bar at the start of the week indicating how much of the weekly goal is accomplished. |
| 33 | As a user, I would like to be able to connect with my friends. |
| 34 | As a user, I would like to be able to send my workout plan to my friends. |
| 35 | As a user, I would like to be able to send fitness challenges to my friends. |
| 36 | As a user, I would like to post my activities to social media applications. |
| 37 | As a user, I would like to be able to view the web app in dark mode. |
| 38 | As a user, I would like to be able to stay motivated through a workout streak counter. |
| 39 | As a user, I would like to be reminded if I am inactive for prolonged periods of time. |
| 40 | As a user, I would like to be able to connect my music streaming platform. |
| 41 | As a user, I would like to be able to create my own workout plans. |
| 42 | As a user, I would like to be able to keep track of my caloric intake. |
| 43 | As a user, I would like to be able to view the mobile application in dark mode. |
| 44 | As a user, I would like to be able to have my data persist within the mobile app. |
| 45 | As a user, I would like my device to remember me until the next time I log out. |
| | |

| 46 | As a user, I would like to be able to choose workouts that help me achieve my body goal. |
|----|--|
| 47 | As a user, I would like to be able to set a workout schedule for the week. |
| 48 | As a user, I would like to be reminded when I have an upcoming workout scheduled. |
| 49 | As a user, I would like to have music that syncs to the rhythm of my workouts. |
| 50 | As a developer, I need to display a loading symbol if requests take longer than a second so that the user does not think the app has frozen. |

Non-Functional

- 1. Must have a modern and simplified user interface that makes it easy for the typical user to navigate.
- 2. Must be accessible 24 hours a day and 7 days a week on both the web and mobile platforms.
- 3. Must protect user information such as username and password on the database through encryption.
- 4. Must not display complex workout visualizations that make it hard for the user to understand.
- 5. Must provide easy access to the database for both the mobile and web applications.