Sprint 2 - Cypress System

ReadMe

Contents of this file include:

- An Introduction and Team information
- A Product Backlog with user stories/tasks, priorities, effort estimates, and current status
- A velocity diagram showing our team's progress
- A test plan detailing test conditions, inputs, and expected outputs for upcoming testing in Sprint 3

Team Members:

- REDACTED
- REDACTED
- REDACTED

Product Backlog

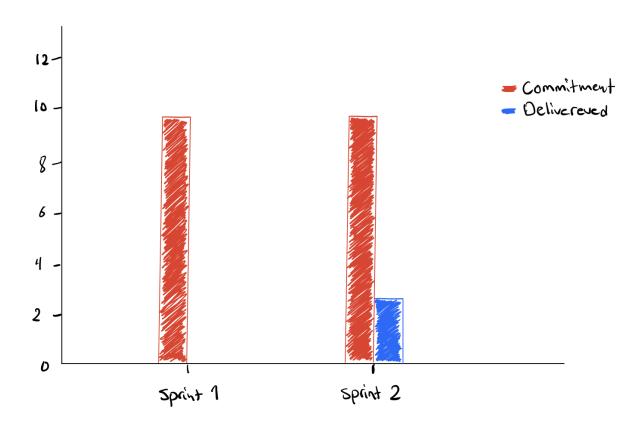
Below is our current backlog of user stories and tasks for the Cypress project. Tasks that have been implemented in Sprint 2 are marked accordingly, with both estimated and actual effort recorded.

ID	User Story / Task	Priority	Estimate (SP)	Status	Actual Effort (SP)
1	Map Integration: Allow users to pinpoint problem locations on a map.	High	5	Complete d	5
2	Problem Report Form: Create a form for citizens to report issues.	High	3	Complete d	3
3	Database Setup: Integrate a database to store submitted reports.	High	5	Complete d	5

4	Geocoding Integration: Convert pinpointed locations to coordinates.	High	5	In Progress	-
5	Duplicate Detection: Identify and flag duplicate problem reports.	Medium	5	Not Started	-
6	Notification Subscription: Enable users to subscribe for updates.	Medium	3	Not Started	-
7	Report Tracking Interface: Allow citizens to track the status of issues.	Medium	3	Not Started	-
8	Data Validation & Security: Ensure inputs are sanitized and secure.	High	4	Not Started	-
9	Admin Dashboard: Provide city officials with an overview of reports.	Low	8	Not Started	-
10	User Testing & Feedback: Conduct usability testing sessions.	Medium	2	Not Started	-

Team Velocity Diagram

The following diagram illustrates our team velocity from Sprint 1 to our current Sprint 2. This helps us predict our capacity for upcoming tasks.



Test Plan

Outlined below are key tests we plan to run near the end of Sprint 3, including test conditions, inputs, and expected outcomes:

1. Map Functionality Test

- Test Condition: Verify that the map correctly registers a user's pinpointed location.
- o **Test Input:** Simulated click on various map coordinates.

 Expected Output: Accurate display of a location marker at the clicked coordinates.

2. Problem Report Submission Test

- **Test Condition:** Ensure that the problem report form validates and submits data correctly.
- o **Test Input:** Valid report details (location, description, category).
- Expected Output: Report is successfully stored in the database with a confirmation message.

3. **Duplicate Detection Test**

- Test Condition: Check that duplicate problem reports are identified.
- Test Input: Submit two reports for the same issue within a predefined radius.
- Expected Output: The system flags the second submission as a duplicate.

4. Notification Subscription Test

- Test Condition: Validate that users can subscribe to status updates for a reported problem.
- Test Input: Subscription request with a valid email address.
- Expected Output: Confirmation message and the email is registered for notifications.

5. Data Validation & Security Test

- Test Condition: Ensure the application sanitizes inputs to prevent malicious content.
- Test Input: Attempt to submit scripts or SQL injection patterns in form fields.
- Expected Output: Input is sanitized, and the system returns an error without processing the malicious data.