# Software Requirements Specification (SRS) Document

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| Project Title | ***Crowd Water Block sourcing: LeafCraft*** |
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| Client | ***Khoushik Ananth*** |

## Brief problem statement

A mobile web app to manage Water-bodies of a location. Map-based interface for citizens to add info on water structures, or monitor water conditions in a region, and for Admin team to manage activities and projects in the area, including engaging with volunteer groups and schools. Activities are short events or talks and cleanups and such. Projects are longer-term like tackling preservation and conservation of Water-bodies.

## System requirements

MongoDB: For Database to store profiles and water-body information.

Express and NodeJS: For Backend.

React and Google API: For UI.

## Users profile

1. Citizens:

Will have a view of local structures and options to add data. Low-level technology proficiency.

Will also have the options to request Events/Projects.

2. Admins:

Will approve various requests regarding the data as well as Events and Projects.
Also should be able to update timelines and pictures of the respective projects. High technology proficiency.

## Feature requirements (described using use cases)

| No. | User Case Name | Description | Release |
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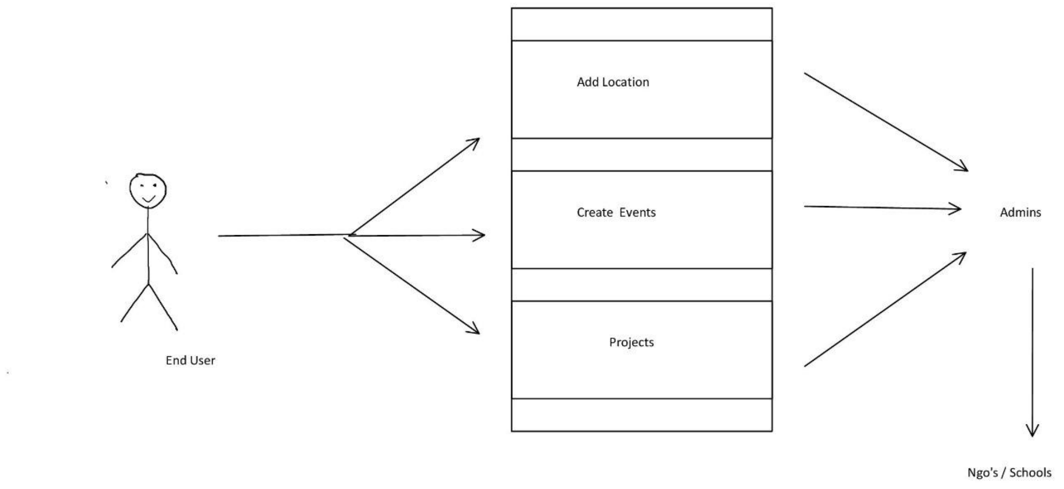
| 1. | Adding Locations | Allows the user to drop a pin from his current location and data regarding the same location. | V1 |
| 2. | Verifying Data | Allows the Admins to verify incoming data from the users | V1 |
| 3. | Layered UI | Displays layers on maps with respect to different levels of water bodies. | V1 |
| 4. | Requesting Events and Projects | Allow the user to request short-term events and long-term projects for water conservation. | V1 |
| 5. | Accepting Events and Projects | Allows the Admins to accept various user events and project requests. | V1 |
| 6. | Events | Will be clearly displayed with proper timings and location details as well as the parties involved (All the CRED operations) | V1 |
| 7. | Projects | Will have a proper timeline and carousel-like picture display for progress (All the CRED operations) | V1 |
| 8. | | | |
| 9. | | | |

## Use case diagram



DASS-SRS-UML Diagram Page 1

## Use case description

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| **Use Case Number:** | UC-1 |
| **Use Case Name:** | Adding Locations. |
| **Overview:** | This allows the user to drop a pin from his current location and data regarding the same location which will then be reviewed by a System Admin and then be added to the database. |
| **Actors:** | Users and Admins |
| **Precondition:** | Verification of the users. |
| **Flow:** | Main (success) Flow:<br>1. User Drops Pin.<br>2. Adds location details<br>3. Admin receives the data |

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| | 4. Admin verifies the data<br>5. Datapoint is accepted and added to the database. |
| | Alternate Flows:<br>1. User Drops Pin<br>2. Adds location details<br>3. Admin receives the data<br>4. Admin verifies the data<br>5. Datapoint is rejected. |
| **Post Condition:** | Verification by Admins |

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| **Use Case Number:** | UC-2 |
| **Use Case Name:** | Adding Events |
| **Overview:** | The users can request Events that are short-term and once accepted by the admin, will be advertised along with specific locations and timings of the event. |
| **Actors:** | Users, Admin, and Local Populace |
| **Precondition:** | Verification of the users. |
| **Flow:** | Main (success) Flow:<br>1. User requests for adding an Event.<br>2. Admin receives the request.<br>3. Admin Accepts the request.<br>4. The Local Authorities and population are then advertised with appropriate details for maximum participation.<br>5. The Event with appropriate pictures will be archived once completed. |
| | Alternate Flows:<br>1. User requests for adding an Event.<br>2. Admin receives the request.<br>3. Admin rejects. |
| **Post Condition:** | Acceptance by Admins and involvement of local population regarding the event. |

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| **Use Case Number:** | UC-3 |
| **Use Case Name:** | Adding Projects |

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| **Overview:** | Users or Admins can add long-term goals regarding a specific location and have a timeline regarding the progress of various conservational works undertaken at the location. |
| **Actors:** | Users, Admins, and NGO’s/Local Populace. |
| **Precondition :** | Verification of the users. |
| **Flow:** | Main (success) Flow:<br>1. User requests for adding a Project.<br>2. Admin receives the request.<br>3. Admin Accepts the request.<br>4. A specific timeline detailing various tasks and pictures for each stage are displayed. |
| | Alternate Flows:<br>1. User requests for adding an Event.<br>2. Admin receives the request.<br>3. Admin rejects. |
| **Post Condition:** | Acceptance by Admins and involvement of local NGOs regarding the project. |