**CS442 Mobile Application Development**

**Version 1.1**

**Project Team #10**

**Team Members:**

Chethan B (cbhaskar)

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Josh Koblich (jkoblich)

“**Compost Crossing**”

**Project Name: “Compost Crossing”**

**Description**: Compost Crossing is an app that enables residents, composters, and urban farmers to access information about compost solutions within a neighborhood. It allows users to view profiles, join networks of composters, and collect and distribute locally made compost to reduce the waste residents create. Compost Crossing promotes closed loop food waste systems in urban settings, creates closer communities anchored around a central cause, and allows data collection on composting to help inform policy.

**Idea**:

* One stop solution for urban compost management.
* Connects composters with residents who are ready to give their compost waste to recycle.

**Targeted user base**: Composters and Residents

**Features**:

1.       Home screen to pick which type of user

2.       Composter flow:

* See the list of resident who want to provide their compost
* See transaction history
* Accept a compost from resident
* Creates his/her own profile

3. Resident/Contributor flow:

* Post Ads about their compost
* See composter near by
* Create his/her own profile
* See transaction history

**Task Completed:**

* Research on project topic and features.
* Project topic and features has been decided.
* Sample Mock screen preparation is done.

**Project Schedule:**

|  |  |  |
| --- | --- | --- |
| **Date** | **Items to be completed** | **Status** |
| 9th October 2016 | Report 1 submission | Complete |
| 15th October 2016 | Mock Screen Preparation | Completed |
| 16th October 2016 | Report 2 submission | Completed |
| 22rd October 2016 | Prototype and document preparation |  |
| 23rd October 2016 | Phase 1 Submission |  |

**System Design**

**Modules:**

1.Composter

2.Resident

3.News Articles

DB

Composter Module

Composter Login/Registration

Telephony

Ad Details

Ad List View

Resident Module

DB

Composter Login/Registration

Deactivation

Ads List

Post Ad

DB

View News

Service/Broadcast

News Module

Notification

**Database Design: Table**

**Table Name:**

t\_news\_articles

**Table Fields:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| News\_Id | Date | Title | Conetnt | NotificationSent |

**Table Name:**

t\_composter\_details

**Table Fields:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Id | L\_nmae | F\_name | City | State | Address |

**Table Name:**

t\_composter\_ad\_details

**Table Fields:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Ad\_Id | Title | City | State | Address | Cost | Drop | Weight |

**Table Name:**

t\_resident\_details

**Table Fields:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Id | L\_name | F\_name | City | State | Address | Phone |

**Database Hosting:**

Database will be hosted in firebase database system and the android application will interact with Firebase REST API get and put the data.

**Android Modules:**

1. **Android Services and Broadcaster and Receiver:**

To get the appropriate news article to get displayed to the respective user, android service will run in the background and check in the database server if any new news article is published background service will push notification to the user.

1. **Android Notification Service:**

Notification service will push notification to the user device if there is any new news article is published.

1. **Telephony**

When composter clicks on the call icon in the application screen, telephony module will launch call using the telephony module.

**Work Items:**

|  |  |  |
| --- | --- | --- |
| **Description** | **Date** | **Status** |
| Git repository created | 10/23/2016 | Completed |
| UI XML files creation | 10/23/2016 | Completed |
| Database design | 10/25/2016 | Completed |
| UI flow diagram updated | 10/30/2016 | Completed |
| Individual screen design with working flow for composter module | 10/30/2016 | Completed |
| Design document preparation | 10/30/2016 | Completed |

**Team Work Split:**

|  |  |
| --- | --- |
| **Team Member** | **Task** |
| Harshavardhan Patil |  |
| Chethan B |  |
| Josh Koblich |  |
| Subakar SE |  |

**Change log:**

|  |  |  |
| --- | --- | --- |
| **Document Version** | **Date** | **Remarks** |
| **V1.0** | **10/22/2016** | **Phase 1 Idea document** |
| **V1.1** | **10/22/2016** | **Phase 2- Design document** |
|  |  |  |
|  |  |  |
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