

Locust – Tracker for Safety

Data Design Document

Submitted to:

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for the course
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Unique Reference:

The documents are stored in <https://github.com/manologhernandez/SOS/tree/master/03-Design%20Engineering>.

Document Purpose:

To show the data design of the application Locust. The data design includes the data design diagram, data access objects, transfer objects, and list of data sources.

Target Audience:

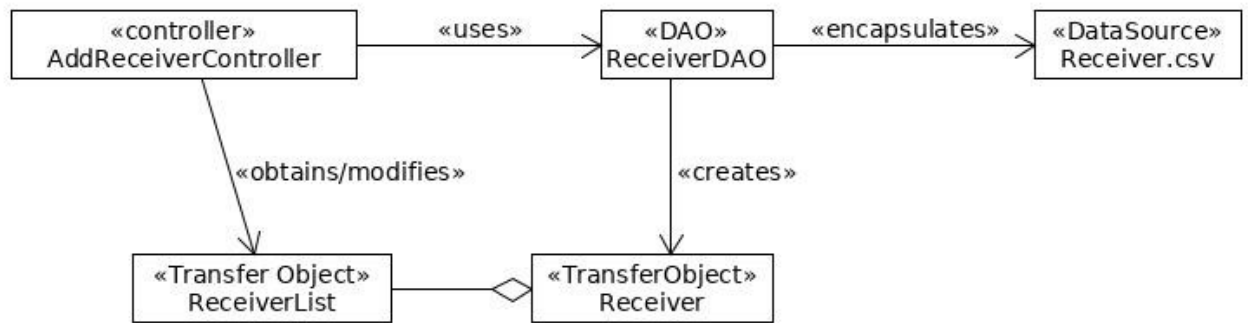
Asst. Prof. Ma. Rowena C. Solamo

Revision Control***History Revision:***

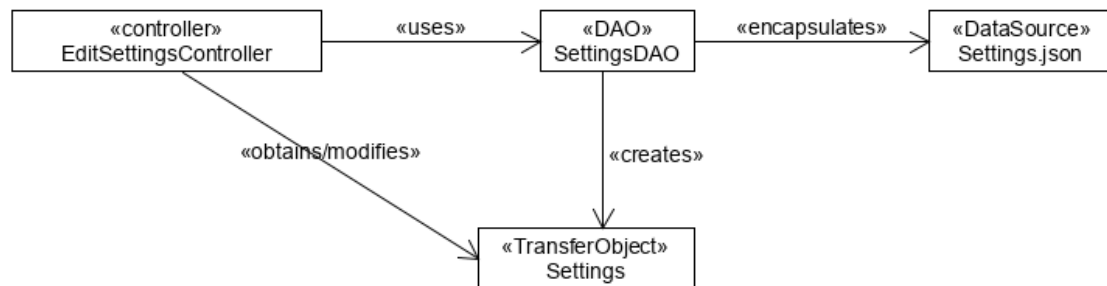
| <i>Revision Date</i> | <i>Person Responsible</i> | <i>Version Number</i> | <i>Contribution/Modification</i> |
|---------------------------------|--------------------------------------|----------------------------------|--|
| 10/22/19 | Jimuel Celeste, Jr. | 1.0 | Initial Document; Added purpose, audience; Edited data design diagrams, DAO, transfer objects, list of data source |
| 10/23/19 | Manolo Hernandez | 2.0 | Added data source settings.json, Edited data design for EditSettingsController Class |
| 10/25/19 | Ricardo Puato | 3.0 | Finalized the Document. |

Data Design:

1. For *AddReceiverController* controller class:



2. For *EditSettingsController* controller class:



Data Access Object (DAO) or DBClasses:

| Class Name | Description |
|-------------------|--|
| ReceiverDAO | This data access object is responsible for getting receiver data from a file containing receivers' information named <i>Receiver.csv</i> . |
| SettingsDAO | This data access object is responsible for getting the current settings configuration data from the file named <i>Settings.csv</i> . |

TransferObject or Persistent Classes:

| Class Name | Description |
|--------------|---|
| Receiver | This transfer object is responsible for holding the information of a receiver—receiver record. |
| ReceiverList | This transfer object is responsible for holding a list of receiver records. |
| Settings | This transfer object is responsible for holding the current settings configuration data of the application. |

List of Data Source:

File Name: Receiver.csv

Description: This is the file that contains the receiver records. It is structured as follows:

- Each line represents a single record
- Fields are separated by a comma (,)
- Order of fields:

1. name
2. phone_number

Sample Source File:

Jimuel, 09288918299

Manolo, 09288918292

Ricardo, 09288918291

File Name: Settings.json

Description: This is the file that contains the current settings configuration of the application. It is structured as follows:

- Every attribute is in a key : value pair
- Attributes are grouped by braces ({,})
- Attributes are separated by commas (,)

Sample Source File:

```
{  
    "Name":"Manolo Hernandez",  
    "Save Location Frequency":30,  
    "No. of Saved Locations":5,  
    "Default Message":"SOS! Send Help ASAP!"  
}
```