SOFTWARE DESIGN SPECIFICATION
PROJECT 1 : ADDRESS BOOK

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PROJECT 1 - TEAM 3

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Revision History

Revision	Date	Author(s)	Description
.1	23.01.17	Haley Whitman	Created initial outline of document
.1	25.01.17	Haley Whitman	Added all code snippets

1 Introduction

1.1 Intended Audience

The following document covers all functionality of the front and back end code and how they relate with the user's experience. This document is intended for programmers, team managers, and quality assurance on the developing team to ensure that the code is running to this specification.

1.2 How to Use this Document

This document is intended to help organize all modules, classes, and functions found in the Address Book code. It is meant to help all team members design their components to this specification, as well as having a straightforward method of analyzing

2 Summary

The entirety of the program is based off of Java JDK 8, which is using a TSV file format to both load and export address book files. This document itself was created from the list of customer specifications which, with customer meetings, guided the creation of the Software Requirements Analysis, which was used to create the requirements needed to begin programming. This document will help create an Quality Assurance documents needed to test the quality of the resulting application.

This document will contain all programming interactions between modules, classes, and functions. This will be achieved by both diagrams and showing all function headers and descriptions of what they achieve and their interactions.

3 User Interface Architecture

3.1 GUI Handbook

```
1  public class AddressEntryFrame extends JFrame {}
```

```
1  public AddressEntryFrame() {}
```

```
1  public void closeWindow() {}
```

3.1.1 Buttons

```
1  Void deleteButton() {}
```

```
1  void editButton() {}
```

```
1  public class NewEntry {}
```

```
1  public void addEntry() {}
```

3.2 Back-End Architecture

3.2.1 Contact Class

The contact class is where all data regarding each entry in the address is kept. This class utilizes strings to hold all information about each entry.

```java
public Contact(String fn, String ln, String phone, String email,
        String add, String city, String state, String zip) {
    _firstName = fn;
    _lastName = ln;
    _phone = phone;
    _email = email;
    _address = add;
    _city = city;
    _state = state;
    _zip = zip;
}
```

```java
public String getFirstName() {
        return _firstName;
}
public void setFirstName(String value) {
        _firstName = value;
}
```

```java
public String getLastName() {
        return _lastName;
}
public void setLastName(String value) {
        _lastName = value;
}
```

```java
public String getPhone() {
    return _phone;
}
public void setPhone(String value) {
    _phone = value;
}
```

```java
public String getEmail() {
    return _email;
}
public void setEmail(String value) {
    _email = value;
}
```

```java
public String getAddress() {
    return _address;
}
public void setAddress(String value) {
    _address = value;
}
```

```java
public String getCity() {
    return _city;
}
```

```
4  public void setCity ( String value ) {
5      _city = value ;
6  }
```

```
1  public String getState () {
2      return _state ;
3  }
4  public void setState ( String value ) {
5      _state = value ;
6  }
```

```
1  public String getZip () {
2      return _zip ;
3  }
4  public void setZip ( String value ) {
5      _zip = value ;
6  }
```

3.2.2 AddressBook Class

```
1  AddressBook ( String filepath ) { }
```

```
1  public void Save ( String filepath ) { }
```

```
1  public void Add ( Contact data ) { }
```

```
1  public void Delete ( Contact data ) { }
```

```
1  public Contact SearchBy ( Integer key ) { }
```

3.2.3 Sorting

```
1  public void SortByName () { }
```

```
1  public void SortByZip () { }
```

```
1  public static Comparator < Contact > COMPARE_BY_NAME =
2                                  new Comparator < Contact >() {
3      public int compare ( Contact one , Contact other ) { }
4  }
```

```
1  public static Comparator < Contact > COMPARE_BY_ZIP =
2                                  new Comparator < Contact >() {
3      public int compare ( Contact one , Contact other ) { }
4  }
```

4 Appendices

4.1 Definitions and Acronyms

4.1.1 Definitions

4.1.2 Acronyms and Abbreviations

GUI	Graphical User Interface
SDS	Software Design Specification
SRS	Software Requirement Specification
TSV	Tab-Separated-Values