

# Gumtree Adressbook – Development Guide

## **Introduction**

The purpose of this application is to read structured data in provided AddressBook file and answer following questions:

1. How many males are in the address book?
2. Who is the oldest person in the address book?
3. How many days older is Bill than Paul?

## **Structure**

- build.gradle – gradle configuration for building application
- src – all source code
- doc – all available documentations
- data – structured (real and test) data read by application

## **Preparation**

To build application gradle must be present beforehand. To build source type in command line:

*>gradle build*

## **Usage**

To launch application use following command and follow instructions on screen:

*>gradle run*

## **Testing**

To run available tests type in command line:

*>gradle test*

There are 2 types of testing classes:

- access – for reading data from data files
- controller – for answering required questions

Tests report can be found in directory build/reports/tests/index.html

## ***Configuration***

All configuration files are located in `src/main/resources` and `src/test/resources`.

- `access.properties` – defines mapping between entity name and file name
- `config.properties` – specifies date format and path to data files
- `strings.properties` – stored text shown to user that could be localized
- `log4j2.xml` – default configuration file for log4j 2 library

## ***Libraries***

Besides Gradle for dependency management and Java packages, following external libraries were used:

- Joda-time – for parsing, formatting and doing date related operations
- Google Guava – mainly for operations related matching data in collections
- Log4j 2 – provides error logging capability