Software Engineering: Process & Tools

Assignment 1
WeatherApp User Manual

Choc Vanilla Thunder

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Part I: Installing the weather app

Release versions of weather app are distributed in a zip file named
weather-app-<version number>.zip.
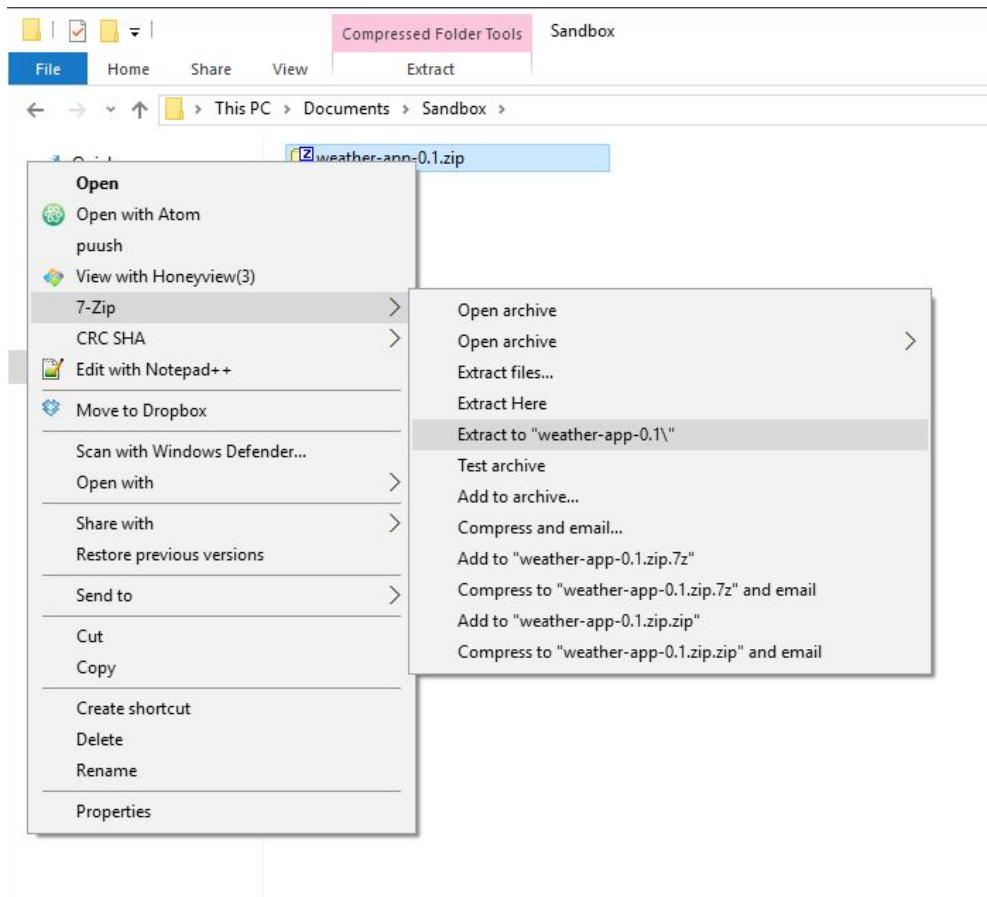Installation is very simple, extract this archive to preferably empty destination directory
and then run the .jar file to launch the application.

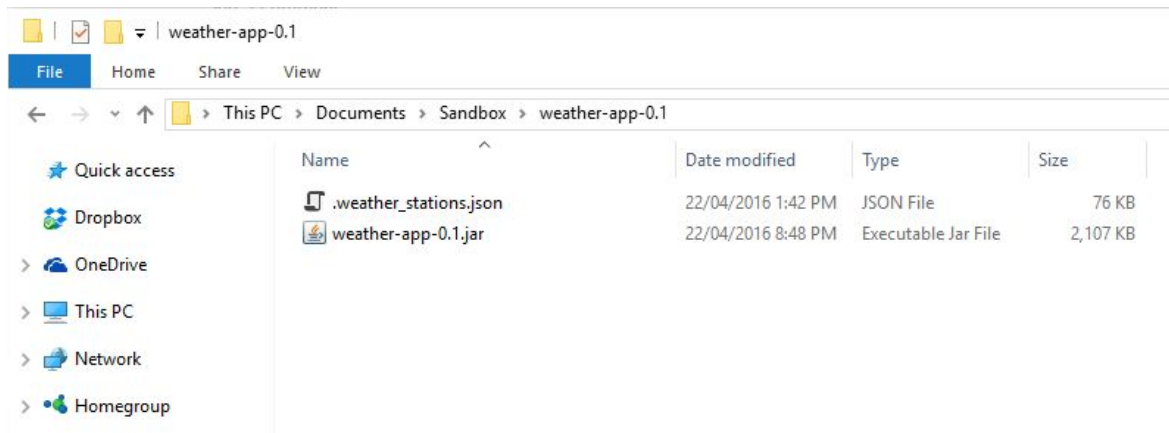## 1.1 - Installation Guide

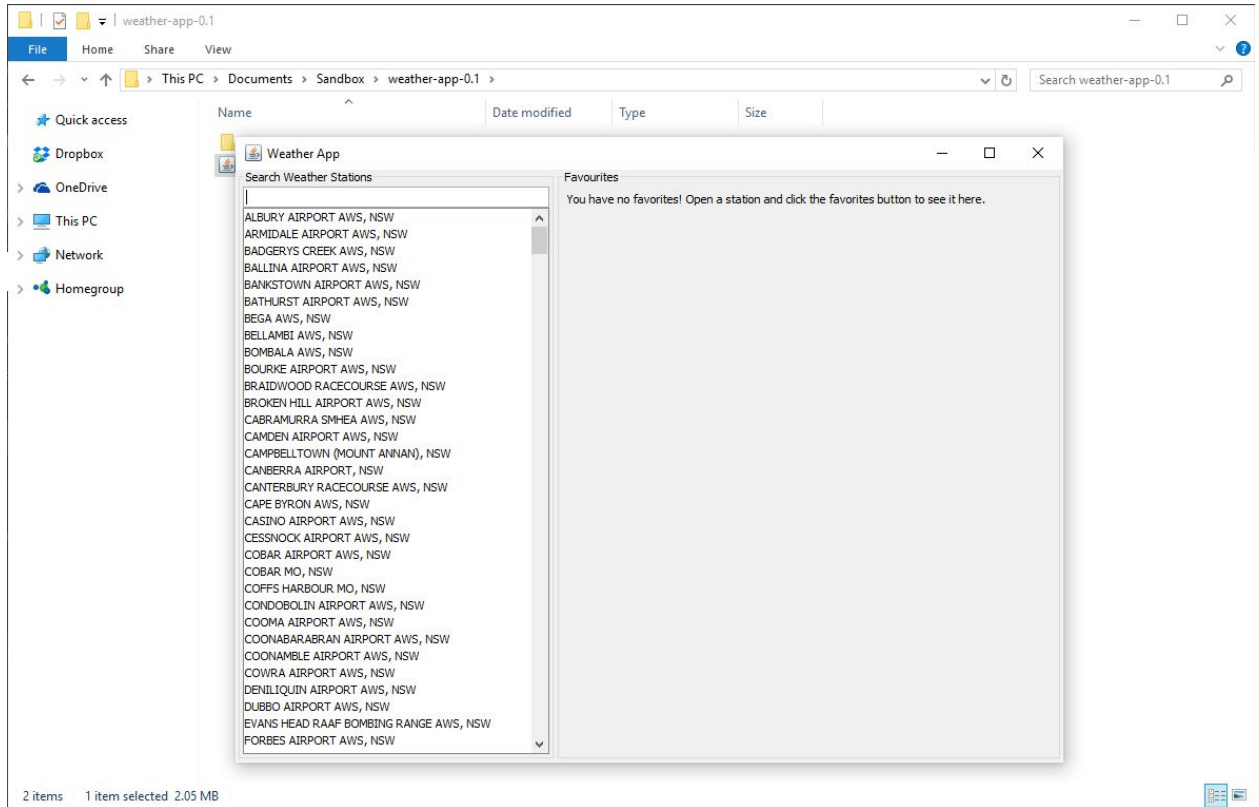1. Navigate to the archive of the latest WeatherApp release.
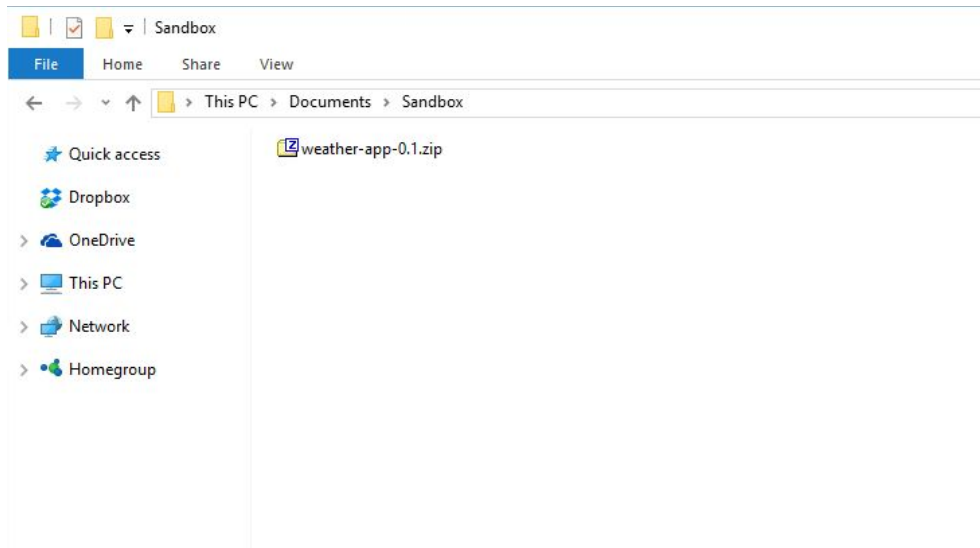
2. Extract the contents of the archive

3. Run the jar file.

4. The application can now be used.

Part II: Using the weather app

2.1 - Before using the app

Before starting the weather app, please ensure that the most recent version of Java is installed. Without this, the weather app will not be able to function properly and as such please verify the installation at Java.com.

2.2 - Starting the weather app

In order to start using the weather app, navigate to the folder in which the compiled Java file is located using the '*CD*' command - both Windows and Linux - or by double clicking on the required folders on your computer. Once doing so, this will open a small screen in which to start to use the app.

2.3 - Using the main page

Upon opening the software, you will be greeted by the main menu that is split into three different parts:

1. A search bar for searching for a valid weather station.
2. A list of all the weather stations that shrinks as you search.
3. A group of favourite weather stations which can be added later in the station menu.
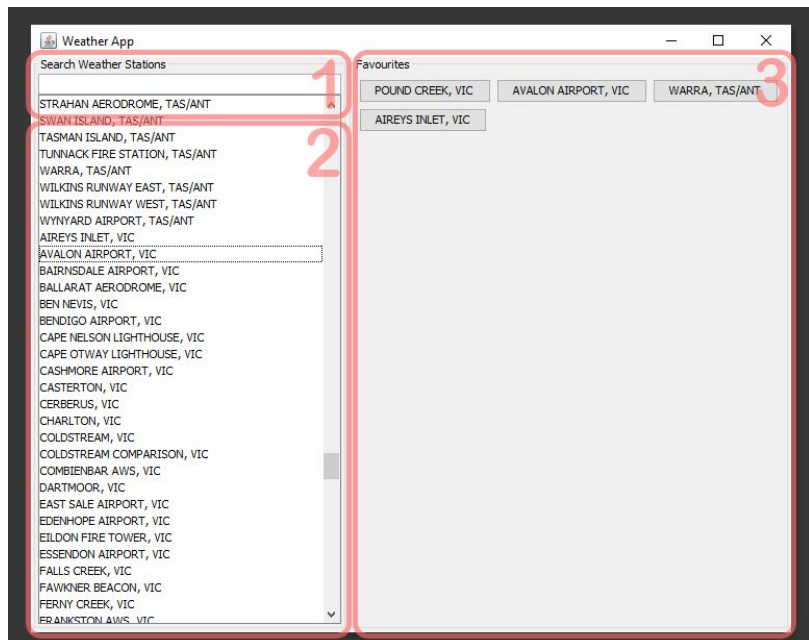
2.3.1 - Search weather stations

In order to start using the weather app, a weather station must first be selected from the list on the bottom left of the interface. Although not necessary, it is highly advised to use the search bar at the top of this list to increase the efficiency in which this app is used.

To use the search bar:
1. Move your cursor to the small bar atop the list of weather stations on the left.
2. Using the mouse, click on it, and search for the desired station using the computer's keyboard.

Notice how as the characters are input into the search bar, the list will gradually begin to decrease in size, until the desired station is the final one left within the list.

2.3.2 - List of weather stations

Once the desired city/town has been found, click on the desired station within the list using the mouse in order to open up details about the weather surrounding the station[2.4].

2.3.3 - Favourite weather

Favourite weather stations are listed within this section of the app that, once clicked using the mouse, will open the station related to that name. Reducing the amount of time it takes to find a frequently visited station and allowing for a more streamlined experience with the program.

*Note: If there are no favourites, this is due to the fact that no favourites are added upon first starting up the app. To add a favourite, please see section 2.4.1

2.4 - Weather station details

Each weather station within the app has a consistent format, not matter what town/city is searched. As a result, this provides easy readability for all users of the application. Although greeted by a seemingly complex design, it comes down to four different sections in which the details are split.

1. Favourite and refresh buttons for managing the station.
2. Latest observations of the weather surrounding the station, laid out in a simple, easy to read manner.
3. An observation chart, detailing the temperature over the last twenty four hours
4. Observation table, with an in-depth report of the last four days of the weather.
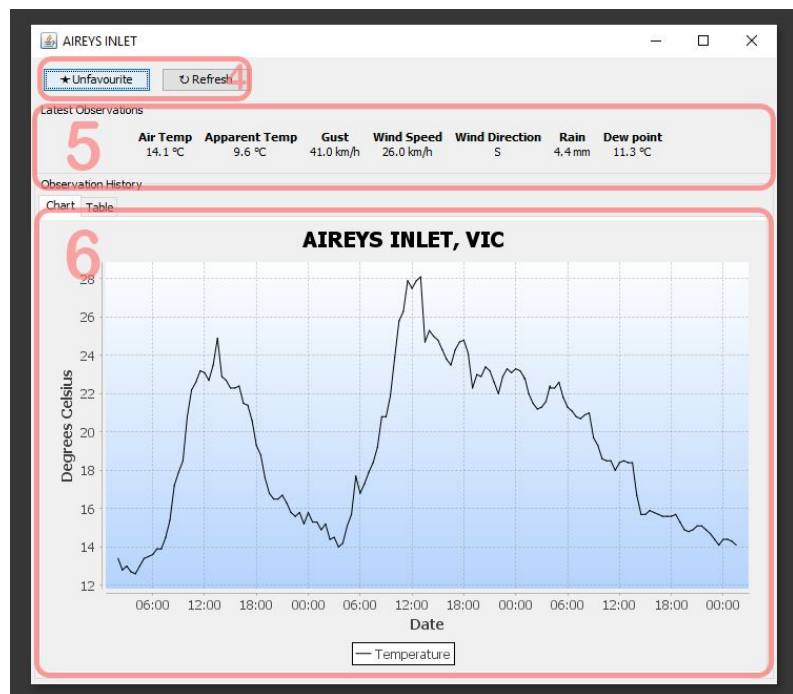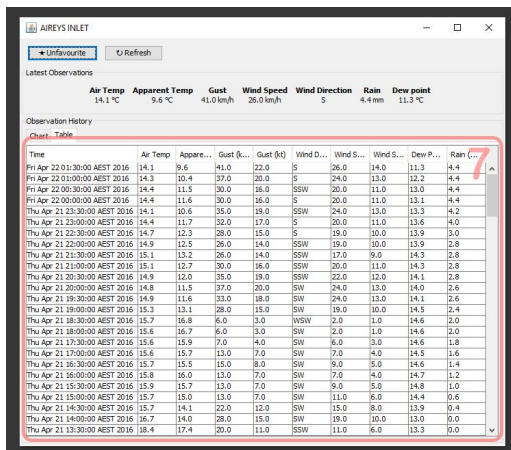
2.4.1 - Favourite and refresh buttons

Located at the top left above the weather observations, the favourite button adds the selected weather station to the list of favourites in the main menu. Once selected, the station will appear as a small button within the favourites section making it easier to find the next time. In order to delete the favourites. Simply click the button a second time to remove it from this list.

Located next to the favourite button, the 'refresh' button allows for the data to be updated to newly created data via the Bureau of Meteorology website.

2.4.2 - Latest observations

The latest observations provide an easy to read guide on the current state of the weather around the specified station. The details of which are.

- The current air temperature
- Apparent air temperature
- Highest wind speed recorded
- Current wind speed
- Direction of wind
- Total amount of rain
- Dew point

Latest Observations

Air Temp	Apparent Temp	Gust	Wind Speed	Wind Direction	Rain	Dew point
11.0 °C	6.2 °C	24.0 km/h	19.0 km/h	SSW	0.0 mm	4.5 °C

2.4.3 - Weather observation chart

Providing an insight of the difference in temperature over time, the weather chart gives a visual representation of the temperature during the last twenty four. To reduce problems with those that are visually impaired, the graph has been specially designed with contrasting colours in mind whilst visually showing hot and cold temperatures using color.

2.4.4 - Weather observation table

In order to provide a more in depth report of the weather, the app also features section that shows weather specifications over the last four days in the format similar to that of the latest observations.

Observation History

Chart | Table

Time	Air Temp	Appare...	Gust (k...	Gust (kt)	Wind D...	Wind S...	Wind S...	Dew P...	Rain (...
Fri Apr 22 17:30:00 AEST 2016	11.0	6.2	24.0	13.0	SSW	19.0	10.0	4.5	0.0
Fri Apr 22 17:00:00 AEST 2016	11.8	5.6	35.0	19.0	S	26.0	14.0	4.3	0.0
Fri Apr 22 16:30:00 AEST 2016	12.2	6.1	39.0	21.0	S	26.0	14.0	4.7	0.0
Fri Apr 22 16:00:00 AEST 2016	12.7	6.3	41.0	22.0	S	28.0	15.0	5.1	0.0
Fri Apr 22 15:30:00 AEST 2016	12.4	5.3	39.0	21.0	S	32.0	17.0	5.3	0.0
Fri Apr 22 15:00:00 AEST 2016	13.2	6.7	37.0	20.0	S	28.0	15.0	4.6	0.0
Fri Apr 22 14:30:00 AEST 2016	12.5	6.1	37.0	20.0	S	28.0	15.0	5.0	0.0
Fri Apr 22 14:00:00 AEST 2016	13.1	7.2	35.0	19.0	S	26.0	14.0	6.0	0.0
Fri Apr 22 13:30:00 AEST 2016	13.9	8.0	35.0	19.0	SSE	26.0	14.0	6.0	0.0
Fri Apr 22 13:00:00 AEST 2016	13.2	6.8	37.0	20.0	S	28.0	15.0	5.1	0.0
Fri Apr 22 12:30:00 AEST 2016	12.8	6.5	39.0	21.0	S	28.0	15.0	5.5	0.0
Fri Apr 22 12:00:00 AEST 2016	12.7	6.8	37.0	20.0	S	26.0	14.0	5.8	0.0
Fri Apr 22 11:30:00 AEST 2016	12.4	5.7	39.0	21.0	SSE	30.0	16.0	5.6	0.0
Fri Apr 22 11:00:00 AEST 2016	12.0	5.9	37.0	20.0	SSE	28.0	15.0	6.5	0.0
Fri Apr 22 10:30:00 AEST 2016	10.5	3.5	43.0	23.0	S	32.0	17.0	5.9	0.0
Fri Apr 22 10:00:00 AEST 2016	10.5	3.9	37.0	20.0	S	30.0	16.0	5.9	0.0
Fri Apr 22 09:30:00 AEST 2016	10.7	3.6	43.0	23.0	S	33.0	18.0	6.6	0.0
Fri Apr 22 09:00:00 AEST 2016	10.5	4.3	39.0	21.0	S	30.0	16.0	7.9	2.4
Fri Apr 22 08:30:00 AEST 2016	9.9	5.2	32.0	17.0	S	24.0	13.0	9.1	2.4
Fri Apr 22 08:00:00 AEST 2016	9.9	4.9	32.0	17.0	S	26.0	14.0	9.6	2.4
Fri Apr 22 07:30:00 AEST 2016	9.6	4.6	33.0	18.0	S	26.0	14.0	9.5	2.4
Fri Apr 22 07:00:00 AEST 2016	9.7	5.5	32.0	17.0	S	22.0	12.0	9.7	2.4
Fri Apr 22 06:30:00 AEST 2016	10.4	6.4	32.0	17.0	S	22.0	12.0	10.4	2.4
Fri Apr 22 06:00:00 AEST 2016	10.7	6.8	30.0	16.0	SSE	22.0	12.0	10.7	2.2
Fri Apr 22 05:30:00 AEST 2016	10.7	6.4	32.0	17.0	SSE	24.0	13.0	10.7	2.2