



## ÜBUNG 4

Gruppe [3]

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### Aufgabe 1: Durchführung von Sprint 1

#### 1.1: Das Ziel von Sprint 1

1 Punkt

The central functions of the app will be implemented. Those are:

- Table view
- Sorting function in the table by column
- First GUI and Map
- Data of the newest date shown on the map
- Visualize timeline on the map
- Navigate between Table- and Mapview

#### 1.2: Durchführung von Sprint 1

8 Punkt

Link to the project:

<http://1-dot-itse16-149521.appspot.com>

[https://github.com/alpox/ITSE\\_16](https://github.com/alpox/ITSE_16)

What created extra effort?	User history	Why this one?
To implement an ORM-System	S-2.1	There is no need for a ORM-System and it would be extra effort We are not gonna do this task
Because of partly deprecated functionalities and very sparse documentation the implementation effort for the slider was considerably higher than expected	S-3	Because the implementation of this step is not considered critical for the ability of the app to run
The Display of the data on the map proved to take more time than anticipated	S-3	Because the app runs with only the map as stub and the table to display the data.

We added user history 10 because showing the error column in the table is a non-effort task while integrating the table with columns for each attribute.

#### 1.3: Testen

7 Punkt

a) We implemented unit tests only for data service related features of the app in regards to the difficulty of testing user-interface related constructs which would include technologies like web-scraping and DOM-Inspection.

b&c)

## **1. Introduction**

### **1.1. Purpose**

For this tests we use functional oriented test. Our goal is to check every function that we have so far.

### **1.2. Test volume**

We will check all the functions of Sprint 1. These are:

- Display a source information on every page
- Show data in tabular form
- Add functionality to sort the data by column
- Implement a visual prototype of the GUI and show a world map for later data visualization
- Display a navigation bar to change between the available visualization

### **1.3. Referenced documents**

The csv-document in which the data is saved.

## **2. Test environment**

### **2.1. Outline**

The test is split in to seven test sequences. Each sequence contains one of the functions, the application should have so far.

### **2.2. Test instruments**

The test is made on windows 10. The tested browsers are google chrome and internet explorer and the app runs with eclipse.

### **2.3. Test data, test database**

The required data are on a separate csv file, » GlobalLandTemperaturesByMajorCity\_v1.csv«, which we downloaded from OLAT.

### **2.4. Personnel requirement**

For doing the test we need one person.

## **3. Criteria for acceptance**

For a successfull test-completion, all the functions in mentioned in the test volume have to work. An interruption and resuming can be done if there where found some errors while testing. To break the test there has to be a fundamental error with which we cannot continue testing.

## **4. Test cases**

Test section 1:

Purpose: All the functions have to be tested

- 1) Display a source information on every page
- 2) Show data in tabular form
- 3) Add functionality to sort the data by column
- 4) Implement a visual prototype of the GUI and show a world map for later data visualization
- 5) Display a navigation bar to change between the available visualization

Preparatory work: none

Clean-up: none

Notes: none

Test sequence 1-1: Source information

Test case Nr.	Action	Expected result	Foundings
1-1-1	Select: Table Visualization	Source information	Works
1-1-2	Select: Map Visualization	Source information	Works

Test sequence 1-2: Change between visualizations

Test case Nr.	Action	Expected result	Foundings
1-2-1	Select: Table Visualization	It indicates the table	Works
1-2-2	Select: Map Visualization	It indicates the map	Works

Test sequence 1-3: Data in tabular form

Test case Nr.	Page	Expected result	Foundings
1-3-1	Table Visualization	Shows the table	Works

Test sequence 1-4: Sort by column

Test case Nr.	Action	Expected result	Foundings
1-4-1	Select the header of the countries	Sorts the countries from A to Z or reverse	Works
1-4-2	Select the header of the cities	Sorts the cities from A to Z or reverse	Works
1-4-3	Select the header of the average	Sorts the average from smallest to biggest number or reverse	Works
1-4-4	Select the header of the error	Sorts the error from smallest to biggest number or reverse	Works
1-4-5	Select the header of the latitude	Sorts the latitude from smallest to biggest number or reverse	Works
1-4-6	Select the header of the longitude	Sorts the longitude from smallest to biggest number or reverse	Works

Test sequence 1-5: Prototyp of the worldmap

Test case Nr.	Page	Expected result	Foundings
1-5-1	Map Visualization	Shows world map	Works

## Aufgabe 2: Planung von Sprint 1

### 2.1: Planungsspiel Sprint 2

2 Punkte

Story-ID: S-2	Refers to requirement from Professor für Geographie
Story: As a Professor, I want to see a tabular view of the raw data and to be able to filter it.	
Acceptance criteria: <ul style="list-style-type: none"> <li><del>Has a tabular view of all measurement data.</del></li> <li>If there is data, it be can filtered on the criteria of city, country or measurement data.</li> </ul>	
Author: Elias Bernhaut	Date: 16.10.2016
Priority: Kritisch	Effort: 15 hour

  

Story-ID: S-3	Refers to requirement from a citizen
Story: As a citizen, I want to be able to see a chronological temperature profile on the map.	
Acceptance criteria: <ul style="list-style-type: none"> <li><del>A world map shows the temperature for a specific date in different locations.</del></li> <li>The world map shows new temperature for a specified date chosen by moving the slider shown next to the map.</li> </ul>	
Author: Elias Bernhaut	Date: 16.10.2016
Priority: Kritisch	Effort: 30 hours

  

Story-ID: S-4	Refers to requirement from journalist
Story: As a journalist, I want to be able to hide inaccurate data from the visualization.	
Acceptance criteria: <ul style="list-style-type: none"> <li>After activating a checkbox, the inaccurate data is removed from the view.</li> <li>A textbox is used to specify the allowed measurement error.</li> </ul>	
Author: Elias Bernhaut	Date: 16.10.2016
Priority: Wichtig	Effort: 3 hours

  

Story-ID: S-6	Refers to requirement from WWF-Director
Story: As the director of a big international organisation, I want to be able to sort and aggregate the data.	
Acceptance criteria: <ul style="list-style-type: none"> <li><del>The tabular visualisation can be sorted on each column through a click on the header.</del></li> <li>It shows the aggregated data through selection of the data column and the aggregation method in two separate drop down menus and displays the result in a label.</li> </ul>	
Author: Elias Bernhaut	Date: 16.10.2016
Priority: Kritisch	Effort: 5 hours

  

Story-ID: S-9	Refers to requirement from historian
Story: As a historian, I want to be able to select a specific year	
Acceptance criteria: <ul style="list-style-type: none"> <li>The year can be chosen by moving the slider on the map or selecting a year in the tabular view.</li> </ul>	
Author: Alina Marti	Date: 16.10.2016
Priority: Kritisch	Effort: 2 hours

  

Story-ID: S-11	Refers to requirement from Greenpeace-Aktivist
Story: As a Greenpeace activist, I want to visualize the difference in temperature with colours on a map.	
Acceptance criteria: <ul style="list-style-type: none"> <li>Areas with higher temperature increase are colored in a darker hue.</li> </ul>	
Author: Alina Marti	Date: 16.10.2016
Priority: nebensächlich	Effort: 10 hours

**2.2: Aufgabenverteilung für Sprint 2****2 Punkte**

Task Nr.	Geschichte Nr.	Taskbezeichnung	Aufwand	Person	Status
1	S-2.2	The data can be sorted by city, country and measurement	7 hours	Elias	
2	S-3.2	The world map shows new temperatures for a specific date by moving the slider	15 hours	Tom	.
3	S-6.2	Implement the aggregation functions and show the result in a label	3 hours	Johanna	
4	S-9	The year can be chosen by moving the slider or selecting a year in the table	Will be done in Task Nr. 2	Tom	
5	S-4.1	Create a checkbox which removes the inaccurate data from the view	2 hours	Johanna	
6	S-4.2	The checkbox is used to specify the allowed error	1 hour	Johanna	
7	S-11	Areas with higher temperatures are coloured in a darker hue	10 hours	Alina	