## Breakdown structrure estimates per activity

| **Estimated activity in days** | |
|---|---|
| A.1. Requirements & Constraints: interview, documenting | 0.5 |
| A.2. Literature research, find matching technologies | 3 |
| A.3. Impact analysis on problematic scenario's | 0.5 |
| A.3.a Investigate technical factors which lead to problems | 1.5 |
| A.3.b Design solutions for scenaior's | 2 |
| B.4. Compare and Discuss designs, define POC's | 1 |
| C.5. Execute first POC | 8 |
| C.6. Execute second POC | 7 |
| C.7. Execute max third POC | 7 |
| ***Average days needed for the project / research*** | 28 |

| **Estimated Proof of concept / Breakdown in days** | |
|---|---|
| Learning a tool and/or language | 1.5 |
| Installing / Getting started | 0.5 |
| Introduction in ecostystem libraries | 2 |
| transforming data | 2 |
| implementing the POC | 3 |
| possible debugging | 1.5 |
| performance testing | 1.5 |
| documentation | 1 |
| ***Average Subtotal (incl. Risks)*** | 8 |

## Visualisation in calendar days based on estimates per activity

| iteration | period | mon | tue | wed | thu | fri |
|---|---|---|---|---|---|---|
| 1 | 07-03 / 11-03 | | | | | |
| | 14-03 / 18-03 | Plan | | | | Demo |
| 2 | 21-03 / 25-03 | | | | | |
| | 28-03 / 01-04 | Plan | | | | Demo |
| 3 | 04-04 / 08-04 | | | | | |
| | 11-04 / 15-04 | Plan | | Dentist | | Demo |
| 4 | 18-04 / 22-04 | | | | | |
| | 25-04 / 29-04 | Concept 1 | | | | |
| NA | 02-05/ 06-05 | | | | | |
| | 09-05 / 13-05 | | Concept 2 | | | |
| NA | 16-05/ 20-05 | | | | | Print Thesis |
| | 23-05 / 27-05 | End | | | | |

**Activity per iteration**

| | |
|---|---|
| Iteration 1 | Activities A.1 to A.3 |
| iteration 2 | Activity B.4 and C.5 |
| iteration 3 | Activity B.4 and C.6 |
| iteration 4 | Activity B.4 to C.7 |

***Colors eplained for when this document is printed in black/white:***

| | |
|---|---|
| | **Light Blue** |
| | **Darker Blue** |

**Notes**

| | |
|---|---|
| Concept (1,2) | Concept versions of thesis are send to students' supervisor |
| Demo | The student will deliver / demo results from Proof of concept<br>the gathered data and observations |
| Dentist | The student has an appointment, personal note for reference |
| Plan | The team and management evaluate and plan the next iteration |
| Print thesis | The thesis will be send to the copy shop |
| End | Planned date to deliver / send the thesis for Commission<br>Final end date stated by Hogeschool Utrecht is on 31-mei-2016 |