# Annex 1: Project Plan

# 2. Project Management

## 2.1 Scrum

The management of this project is inspired by *Scrum1*, an agile software development framework which facilitates managing tasks in teams. The Scrum framework is based on the experience that most projects are too complex to plan right from the beginning completely and therefore providing an agile and iterative alternative by structuring the project in smaller iterations.

However, the applied process during this project is only loosely based on the Scrum framework since there are several concepts of the original framework that were not applied. Scrum defines roles which describes the different members of a group (*Scrum Master*, *Project Owner* and *Development Team*) as well as several artefacts organizing the project team’s interaction. Due to the nature of the project not having a development team in the proper meaning of the word, but only a single person realizing the bachelor thesis, only some artefacts were applied. The most important applied concept is the Sprint, a two-week time slot which is used to structure the project. At the beginning of each sprint, a *Sprint Planning* is realized between the author as well as the coordinator of the bachelor thesis. The project’s coordinator can be seen as a *Product Owner* in the Scrum framework, prioritizing tasks and guiding the project’s direction.In the *Sprint Planning*, it is decided which tasks are going to be worked at during the two-week sprint. At the end of each sprint, a *Sprint Review* takes place where the development team, meaning the author, presents its results to the *Product Owner*.

## 2.2 Managing the project in GitHub

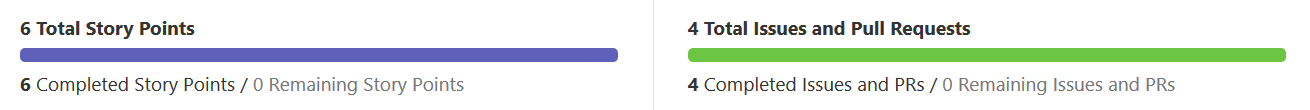
In order to facilitate the project’s management, the online project hosting tool *GitHub* with *ZenHub* as an extension was used. *ZenHub* provides several useful collaboration functions such as a visualization of the task in a board as well as an overview of the remaining workload with Burn-Down-Charts. The ideal burndown is marked as an ideal line in the diagrams which sinks consistently during the sprint. However, due to the fact that this project was held in the course of the semester parallel to usual classes and exams, this ideal progress could rarely be complied with. The tasks are defined in GitHub’s *Issues* where tasks can be named, described and estimated. Story Points are used to estimate the workload of each issue. In this project, one story point is seen as the equivalent of 2 hours of working.

## 2.3 Chronological Order

The Kick-Off Meeting took place at 5th December 2016, where the elemental concepts of the project where discussed. Due to the exams and vacations in December and January, the first two sprints, including the project’s research phase, started irregularly with a longer time frame than usually set. This following section gives an overview of the iterations during this project, using ZenHub’s Burn-Down-Charts to visualize the project’s progress.

### 2.3.1 Iteration #1 (30/12/2016 – 17/01/2017): Planification & Research

The first iteration mainly centered on setting up the project's infrastructure, including the establishment of the repository structure and the virtual machine set up. First research steps were taken by getting familiar with the used geo-information system.

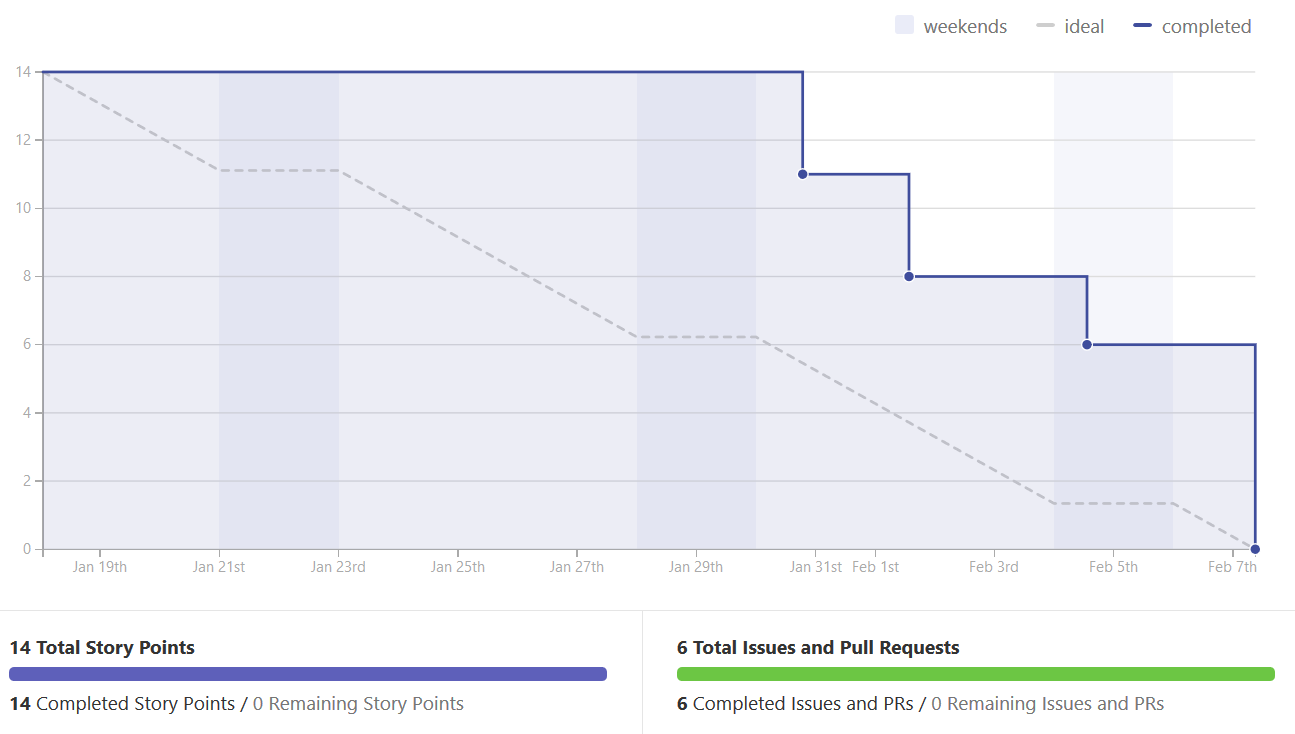


* *Get to know the platform*

*No overview of the burndown because the issues’ status was not tracked back then*

### 2.3.2 Iteration #2 (17/01/2017 – 07/02/2017): Further Research

In this iteration, the knowledge of the used geo-information system was deepened by investigating how to extract essential tourist information from the database. On the other hand, a chatbot library was chosen after comparing different possible candidates. Besides, the project's documentation will be extended by describing theoretical concepts, used tools and the project's objectives.



### 2.3.3 Iteration #3 (07/02/2017 – 21/02/2017): Recommender System And Design

In this iteration, recommender system libraries were examined to find out which one was the most suitable for this project. Afterwards, the system's basic architecture wasdesigned. On top of that, the project's documentation was extended.

*Burndown Chart will be inserted*

# Bibliography

1: The Scrum GuideTM­, Ken Schwaber and Jeff Sutherland