# Rough Project Plan

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| **Creator:** | Fabian Reiner |
| **Date:** | 16.09.2019 |

| **Title: Smart Storage Unit** | |
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| **Starting date: 29.05.2019** | **End date: 8.4.2020** |

## Task

Construction of a storage unit that can hold electronic parts. You should be able to access a database through a touch panel, a website and an Android app. You should also be able to choose electronic parts from the database so that the system turns on a LED on the right position. At high quantities, the system switches to a micro scale instead of manual counting. The system should be able to generate an inventory report.

## Situation Analysis

already known programming languages:
C, PHP, MySQL, Java
still unknown programming languages:
HTML, CSS, JS, Python

hardware:
We use an Arduino and a Raspberry as microcontroller-boards.

## Project Goals

**Goals:**

1. Find items within 15 seconds
2. Automated creation of inventory report
3. Remote access to the database (storage)
4. Database with relevant component information and data sheets
5. Detect the quantity of many items within 5 seconds

## Project Costs

wood: 170 €
touch panel: 80€
Raspberry Pi: 30€
Arduino: 50€
small parts storage: 180€
other (e.g wires): 80€
sum: 590€
workhours: 10€ for every workhour per person
180 workhours per person
1800€ per person
5400€ total

## Project Risks

margin of error from the micro scale too high,
3D printed parts don't fit or are too big for the printer,
to short the LED-strips

## Project organization / Signature

| Coach | Project Team |
|---|---|
| DI Peter Frauscher | 1. Fabian Reiner (team leader) |
| | 2. Rudolf Migirov |
| | 3. Stefan Zauper |