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Planning

The initial Gantt diagram of the project is shown below:

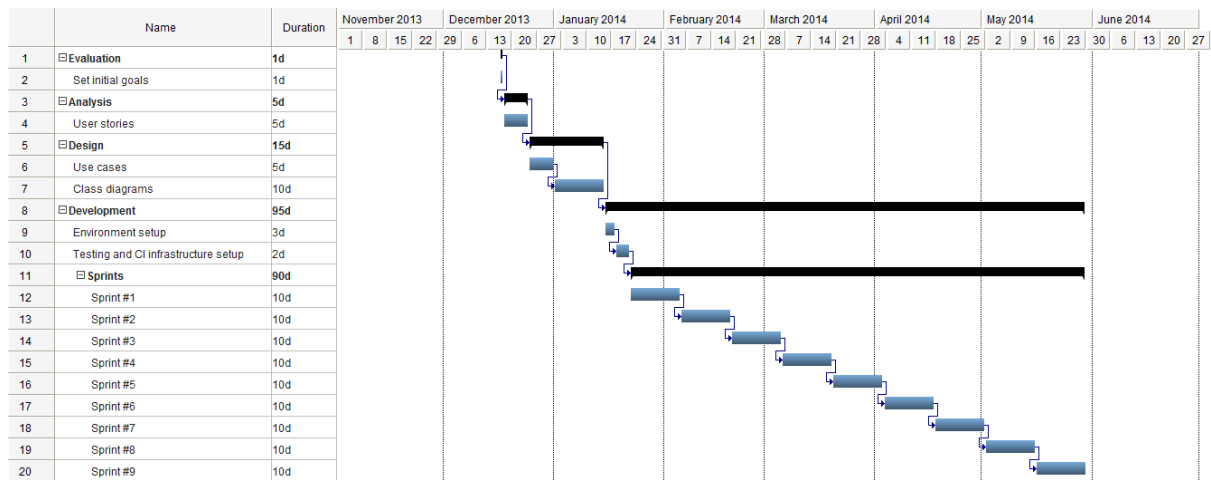|	Name	Duration
1	⊟Evaluation	1d
2	Set initial goals	1d
3	⊟Analysis	5d
4	User stories	5d
5	⊟Design	15d
6	Use cases	5d
7	Class diagrams	10d
8	⊟Development	95d
9	Environment setup	3d
10	Testing and CI infrastructure setup	2d
11	⊟Sprints	90d
12	Sprint #1	10d
13	Sprint #2	10d
14	Sprint #3	10d
15	Sprint #4	10d
16	Sprint #5	10d
17	Sprint #6	10d
18	Sprint #7	10d
19	Sprint #8	10d
20	Sprint #9	10d

Figure 1. Initial Gantt diagram

Budget

This section analyses the different costs incurred while developing this project.

Human resources

To calculate the human resources cost, we are considering a cost of **296 € per day**. The breakdown of such amount is the following:

- Annual salary of a senior developer with 10+ years of experience: 45,000 €.

- Company costs (social security, supplies): 22,000 €.

- Total cost: 67,000 €.

This information is coming from the personal experience of the author running a consulting company and understanding the job market in Spain and the United Kingdom.

The maximum amount of working hours per year in Spain in the IT market is 1.808. That's 226 working days. 67,000 / 226 =~ 296 €.

Table 1. Human resources budget

Phase	Duration (days)	Cost (€)
Evaluation	1	296.00 €
Analysis	5	1,480.00 €
Design	15	4,440.00 €
Development	95	28,120.00 €
TOTAL	119	35,224.00 €

Equipment, servers and software licenses

The equipments costs accounted are considering depreciation and amortization, under the following formula:

```
Cost = A/B * C * D
```

Where:

- A: number of months elapsed since product is first purchased and used.
- B: depreciation period (36 months for equipments, 12 months for licenses).
- C: item cost.
- D: percentage usage dedicated to this project (usually 100%).

Table 2. Equipment, servers and software licenses budget

Item	Cost (€)
MacBook Pro Retina 15 inches early 2013	333.33 €
IntelliJ IDEA Personal License	66.33 €
GitHub git hosting	0.00 €
Travis CI	0.00 €
TOTAL	399.66 €

Summary

The total cost of this project has been estimated in **35,623.66 €**