Stage: **F1**

Group symbol: **K07-20a**
Team: **1**

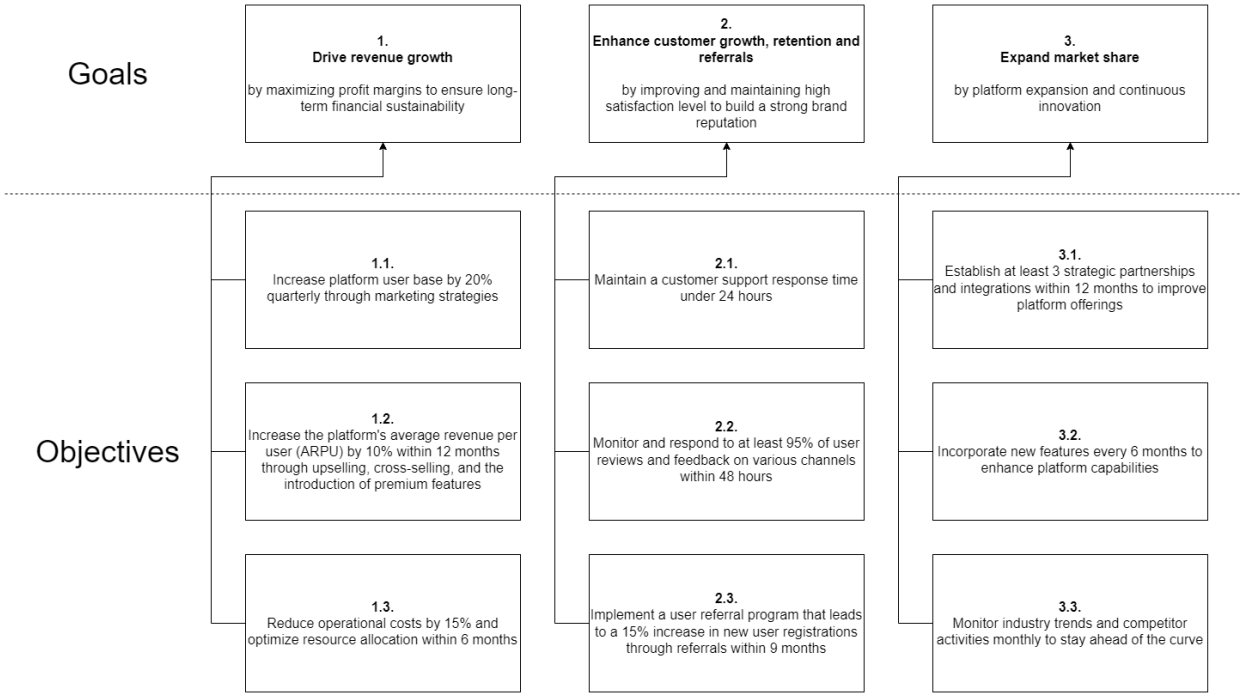
Project title: **InfluBridge**

Team members *(filled by PM, Team Leader)*:

No.	Name	Surname	Student ID	Role
1	Dawid	Galik	205780	*PM, Team Leader*
2	Dominika	Rzepka	271301	*Team member*
3	Jakub	Gałązka	250060	*Team member*
4	Mateusz	Guściora	228884	*Team member*

1 Elaboration of application concept (F1)

1.1 Project (business) goals



1.2 Identification of project's external Stakeholders

Symbol	Name	Role	Description
INF	Influencer	User	Search for cooperation offers.
BR	Brand	User	Looks to advertise with social media influencers.
MA	MarketingAgency	Competitor	Handle influencer collaborations on ads.
REG	Regulator	RegulatorAgency	Authorities that deal with data protection, competition, and consumers.
EXP	Expert	IndustryExpert	Provides detailed information on changes in the social media industry.

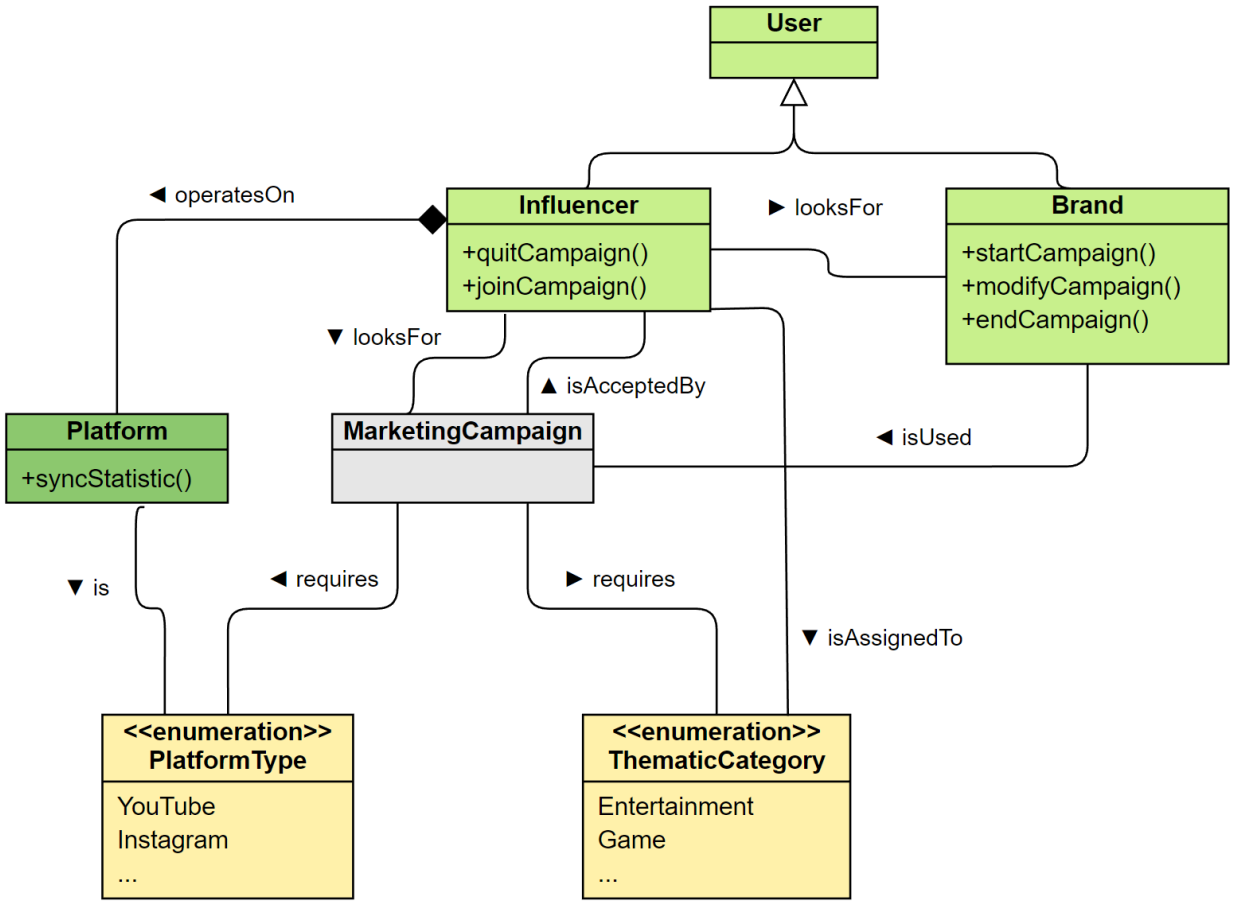
1.3 Domain description

Given domain is influencer marketing based on brand partnership. Influencer marketing is a type of marketing where brands collaborate with influential individuals on social media to promote their products or services. Key features are ability to connect brands with relevant influencers and integration with social media platforms. Target customers are brands looking for influencers to promote their products and influencers seeking brand partnership.

1.3.1 Phenomena in the application domain

- Companies search for influencers that can potentially promote their products.
- Companies offer influencers partnership.
- Influencers present themselves, their social media content and their number of ranges (followers).
- Influencers seek partnership with brands.
- Contract agreement between Companies and users.
- Influencers and brands can be searched by categories.

1.3.2 Domain class diagram



1. Entities:
   - User — there are two type of users:
     (a) Brand (BR) — represents a corporation that offers ”marketing” collaboration.

(b) Influencer (INF) — an individual who is looking for cooperation opportunities.

- MarketingCampaign (MC) — the offer is a description of the required activities concerning the collaboration offered by the company.
- Platform — consists of the description of the influencer and contains statistical information of interest to companies.
- ThematicCategory —- allows you to better characterize the influencer.
- PlatformType —- reflects the type of platform and can serve as a requirement related to the offer.

2. Relationships:

- Influencer–MarketingCampaign — influencers seek interesting campaigns for profit.
- Influencer–Platform — platforms on which the influencer operates.
- Influencer–ThematicCategory — list of categories that the influencer identifies in.
- Brand–MarketingCampaign — Brands issues offer.
- Brand–Influencer — The company looks through the list of influencers in search of interesting individuals to work with.
- MarketingCampaign–PlatformType — campaign requires list of operational platforms.
- MarketingCampaign–ThematicCategory — campaign requires list of categories.
- Platform–PlatformType — Each platform has a specific type.

3. Events:

- Influencer.joinCampaign — influencers apply for an offer.
- Influencer.quitCampaign — influencer quits offer.
- Company.startCampaign — Company can create offers.
- Company.modifyCampaign — Company can edit an offer at any time.
- Company.endCampaign — Company close offer.
- Platform.syncStatistic — synchronized platform statistic.

1.4 Project schedule (Gantt chart)

See attachment below (Figure 1).

1.5 Identification of existing or alternative solutions

Influencer marketing platform that helps brands find and collaborate with influencers:

1. YouTube BrandConnect[1]

   Features: Creator matching, creating contents based on collaboration between brand and creator, payment and reporting.

   Pros: Large and diverse users, targeted content, measurable results.

   Cons: High costs (compared to other forms of marketing), only YouTube, strict guidelines and policies on YouTube.

2. Upfluence[2]

   Features: Searching for influencers, managing influencer relationships, content creation, analytics, collaborating on campaigns.

   Pros: Large database of influencers, advanced search and filtering, campaign management, analytics.

   Cons: A lot of features and functionalities (learning curve), cost, not every popular social media coverage.

3. Tapinfluence[3]

   Features: Influencer search, content creation, campaign management, analytics, network management between influencers and brands.

   Pros: Marketer or/and creator view, campaign management tools.

   Cons: Quality control of content, high cost, a lot of features and functionalities (learning curve).

4. Indahash[4]

   Features: Influencers search, influencers audit, contracts and Payments campaign management, analytics.

   Pros: Mobile app for influencers, rigorous process of approval.

   Cons: Rigorous process of approval.

5. Heepsy[5]

   Features: Search engine of influencers, analytics, promoting brand.

   Pros: Easy and simple, customization of search engine of influencers.

   Cons: High cost, only influencers search engine, limited social media platform.

[1] https://www.youtube.com/ads/brandconnect/ (10.03.2022)
[2] https://www.upfluence.com/ (10.03.2022)
[3] https://app.tapinfluence.com/ (10.03.2022)
[4] https://indahash.com/ (10.03.2022)
[5] https://www.heepsy.com/ (10.03.2022)

1.6 Project context

1.6.1 Application context

Influencer marketing involves partnering with social media influencers and brands to promote products or services on social media platforms. Application would arrange possibility for users to share intended content. Influencer marketing relies heavily on social media platforms. Brands typically identify and collaborate with influencers through this platforms. This type of marketing also involves the use of analytic tools to measure the effectiveness of campaigns and track consumer engagement.

1.6.2 Technological context

The platform would require one or more servers to host the application and database and implementing this servers using containerization will allow it to be independent of the operating system environment. It also would use (and provide) APIs to interact with other services, such as social media platforms or payment gateways. The application would provide web-based interface to interact with its users.

1.6.3 Organisational context

The use of influencer marketing application requires organization to develop clear strategy, processes with define way of working (e.g. maintaining website) and policies specifying frame of working. Organization should provide education and training for employees, as well as give clear guidelines for users. Organization manager should be aware of organization rights and obligations. So should ensure quality practices being used. Organization should address issues related to liability and confidentiality of the users.

1.6.4 Legal context

Influencer marketing is subject to a variety of legal and regulatory requirements, including guidelines related to sponsored content. Brands must ensure that their influencer marketing campaigns comply with this regulations to avoid legal and financial penalties.

1.7 Technologies used in the project

1. Oracle Database Express Edition[6] — Database Management System

   Description: Free, easy-to-deploy and distribute edition of the Oracle leading database system.

   Justification: It is the same powerful Oracle Database system that enterprises around the world rely on, which leaves room to scale the business in future growth.

[6] https://www.oracle.com/pl/database/technologies/appdev/xe.html (10.03.2022)

2. Spring Boot[7] — Backend development

   Description: Java framework used to reduce application development time. Maintaining the best practices for writing applications, it speeds up the process, but also supports in maintaining clean code.

   Justification: Makes programming Java quicker, easier, and safer. Spring's focus on speed, simplicity, and productivity has made it the world's most popular Java framework.

3. Angular[8] — Frontend development

   Description: JavaScript framework created by Google. It is used to build web applications quickly and easily.

   Justification: It is based on the MVC model to reconcile the ideas of JavaScript and the MVC model present in Spring.

4. Git[9] — Version control

   Description: Free and open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

   Justification: Has a tiny footprint with lightning fast performance. It outclasses SCM tools like Subversion, CVS, Perforce, and ClearCase with features like cheap local branching, convenient staging areas, and multiple workflows.

5. Overleaf[10] — Documentation

   Description: An online LaTeX editor that's easy to use.

   Justification: No installation, real-time collaboration, version control, hundreds of LaTeX templates.

6. Google Docs[11] — Documentation

   Description: A collection of office applications and services.

   Justification: Provides a wide variety of office tools in one place with real-time collaboration.

7. Virtual Paradigm[12] — Documentation

   Description: A software design and modeling tool that supports a wide range of UML diagrams.

   Justification: Provides efficient design, modeling and collaboration among team members. It is free and easy accessible.

[7] https://spring.io/ (10.03.2022)
[8] https://angular.io/ (10.03.2022)
[9] https://git-scm.com/ (10.03.2022)
[10] https://www.overleaf.com/learn (10.03.2022)
[11] https://www.google.com/docs/about/ (10.03.2022)
[12] https://online.visual-paradigm.com/(02.04.2023)

8. Justinmind[13] — Mockup

   Description: A tool that facilitates the creation of interactive wireframes, prototypes, and designs for web and mobile applications.

   Justification: A powerful and versatile tool. It is free and easy accessible.

1.8 Project risks

See attachment below (Figure 2).

1.9 Project costs estimation

See attachment below (Figure 3).

[13] https://www.justinmind.com/(02.04.2023)

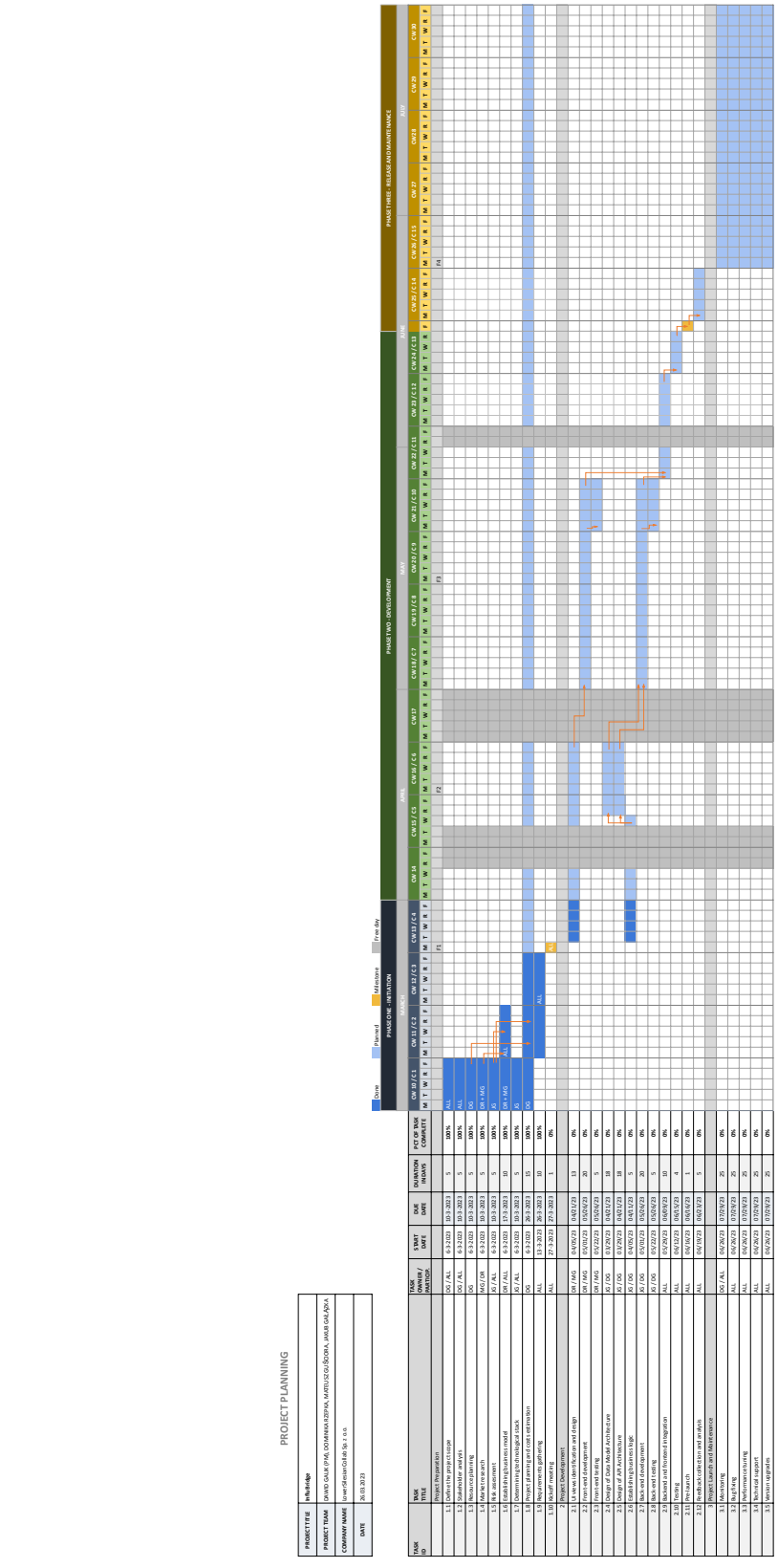


Figure 1: Project schedule (Gantt chart)

PROJECT RISK ESTIMATION

PROJECT TITLE	**InfluBridge**
PROJECT TEAM	DAWID GALIK (PM), DOMINIKA RZEPKA, MATEUSZ GUŚCIORA, JAKUB GAŁĄZKA
COMPANY NAME	LowerSilesianCollab Sp. z o.o.
DATE	Based on general planning 26.03.2023

TASK ID	TASK TITLE	RISK	PROBABILITY	IMPACT ON THE PROJECT
1	Project Preparation			
1.1	Define the project scope	Poorly defined scope	Moderate (10% - 50%)	Low
1.2	Stakeholder analysis	Stakeholder fail to support project or become disengaged	Unlikely (3% - 10%)	Medium
1.3	Resource planning	Schedule estimation is too optimistic	Certain (> 90%)	High
1.4	Market research	Insufficient and inaccurate competitive analysis	Rare (< 3%)	High
1.5	Risk assesment	Overlooking significant risk	Moderate (10% - 50%)	High
1.6	Establishing business model	Adoption of a model that proves to be unprofitable	Moderate (10% - 50%)	High
1.7	Determining technological stack	Selection of technologies that do not offer sufficient capabilities to implement the project	Unlikely (3% - 10%)	Medium
1.8	Project planning and costs estimation	Cost estimation is too optimistic	Moderate (10% - 50%)	High
1.9	Requirements gathering	Incomplete identification of requirements	Unlikely (3% - 10%)	Medium
1.10	Kickoff meating	Terrorist attack and the taking of a team of developers hostage :)	Rare (< 3%)	High
2	Project Development			
2.1	UI views identification and design	Failure to include important user interface elements	Unlikely (3% - 10%)	Low
2.2	Front-end development	Too many scope changes	Moderate (10% - 50%)	High
2.3	Front-end testing	Poorly designed testing, not sufficient	Moderate (10% - 50%)	Medium
2.4	Design of Data Model Architecture	Reckless design of a data model architecture that misrepresents the problem domain	Moderate (10% - 50%)	High
2.5	Design of API Architecture	Implementation of insufficient security and opening the system to potential attacks	Moderate (10% - 50%)	High
2.6	Establishing business logic	Conflicts within internal stakeholders	Unlikely (3% - 10%)	Low
2.7	Back-end development	To many scope changes	Moderate (10% - 50%)	High
2.8	Back-end testing	Poorly designed testing, not sufficient	Moderate (10% - 50%)	Medium
2.9	Backend and frontend integration	Inability to integrate due to previous mistakes during architecture design	Unlikely (3% - 10%)	High
2.10	Testing	Poorly designed testing, not sufficient	Moderate (10% - 50%)	Medium
2.11	Pre-launch	Server problems	Unlikely (3% - 10%)	Low
2.12	Feedback collection and analysis	Wrong insights from feedback	Moderate (10% - 50%)	Low
2.13	Project planning and costs verification	Underestimation of costs and need of more resources	Likely (50% - 90%)	High
3	Project Launch and Maintenance			
3.1	Monitoring	Insufficient focus on analysis	Moderate (10% - 50%)	Medium
3.2	Bug fixing	Failure to make corrections on time and losing interest in the platform because of it	Moderate (10% - 50%)	High
3.3	Performance tuning	Insufficient improvements that will make it difficult to operate comfortably from the system	Moderate (10% - 50%)	Medium
3.4	Technical support	Not enough resources for long term support	Unlikely (3% - 10%)	High
3.5	Version upgrades	Failure to keep up with changes made by competitors	Moderate (10% - 50%)	High

Figure 2: Project risks.

PROJECT COST ESTIMATION

PROJECT TITLE	**InfluBridge**
PROJECT TEAM	DAWID GALIK (PM), DOMINIKA RZEPKA, MATEUSZ GUŚCIORA, JAKUB GAŁĄZKA
COMPANY NAME	LowerSilesianCollab Sp. z o.o.
DATE	Based on general planning and project risks 26.03.2023

TASK ID	TASK TITLE	ESTIMATED HOURS					ACTUAL HOURS	PM / DEV Avg cost	OTHER COSTS	ESTIMATED COST	ACTUAL COST	DIFF
1	Project Preparation	W1	W2	W3	W4	W5						
1.1	Define the project scope	40					40	€50		€2 000	€2 000	€0
1.2	Stakeholder analysis	40					40	€50		€2 000	€2 000	€0
1.3	Resource planning	10					10	€50		€500	€500	€0
1.4	Market research	20						€50		€1 000		
1.5	Risk assesment	10						€50		€500		
1.6	Establishing business model	20	150					€50		€8 500		
1.7	Determining technological stack	10					10	€50		€500	€500	€0
1.8	Project planning and costs estimation	10	10	10	6			€50		€1 800		
1.9	Requirements gathering	150	90					€50		€12 000		
1.10	Kickoff meating	32						€50		€1 600		
	SUM Project preparation	**608**								**€30 400**	**€5 000**	**€0**
2	Project Development											
2.1	UI views identification and design	48	80	80				€50		€10 400		
2.2	Front-end development	80	80	80	40			€50		€14 000		
2.3	Front-end testing	40						€50		€2 000		
2.4	Design of Data Model Architecture	21	35					€50		€2 800		
2.5	Design of API Architecture	21	35					€50		€2 800		
2.6	Establishing business logic	42	28					€50		€3 500		
2.7	Back-end development	70	70	70	35			€50		€12 250		
2.8	Back-end testing	35						€50		€1 750		
2.9	Backend and frontend integration	90	150					€50		€12 000		
2.10	Testing	120						€50		€6 000		
2.11	Pre-launch	30						€50		€1 500		
2.12	Feedback collection and analysis	150						€50		€7 500		
2.13	Project planning and costs verification	102						€50		€5 100		
	SUM Project development	**1632**								**€81 600**	**€0**	**€0**
3	Project Launch and Maintenance											
3.1	Monitoring	31	31	31	31	31		€50		€7 750		
3.2	Bug fixing	31	31	31	31	31		€50		€7 750		
3.3	Performance tuning	31	31	31	31	31		€50		€7 750		
3.4	Technical support	31	31	31	31	31		€50		€7 750		
3.5	Version upgrades	31	31	31	31	31		€50		€7 750		
3.6	Project planning	5	5	5	5	5		€50		€1 250		
	SUM Project development	**800**								**€40 000**	**€0**	**€0**
	TOTAL	**3040**								**€152 000**		

Figure 3: Project costs estimation.