

PATH

Final Project Report

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1. Introduction

1.1 Purpose of this document

This document is to provide the final report of the project PATH which is done as part of DSD course. It includes objectives of the project, how the project is organized, final results of the project, experiences and metrics of the project. It is a framework for future developments and explains work done in the present.

1.2 Intended Audience

The document serve the below audience to understand the design of the project

- The project steering group who validates our project results
- Customers who uses our application that is developed
- All team members of PATH

1.3 Scope

The scope of this document is to provide the final analysis report of the PATH. It covers the results of the project and procedure how these results are achieved.

1.4 Definitions and acronyms

1.4.1 Definitions

Keyword	Definitions
Google MAP API	API provided by Google to use Google maps

1.4.2 Acronyms and abbreviations

Acronym or abbreviation	Definitions
PATH	Public Advice Traveling Help
GIS	Geographical Information System
UIL	User Interface Layer
DAL	Data Access Layer
BOL	Business Object Layer

1.5 References

- [1] Score competition: <http://score.elet.polimi.it/>

- [2] Project details: <http://score.elet.polimi.it/projects/fickas.pdf>
[3] Course details: <http://www.fer.hr/rasip/dsd>
[4] [BTW-PATH-PATH@MDH Project Description.doc](#)

2. Background and Objectives

Public Advice Travelling Help (PATH) is a planning system that helps travelers to get detailed information about any route or place. Users search for routes and places where they want to travel. PATH filters advices according to user requirements and shows them on the output map. PATH philosophy is to encourage support from users to users. Advices are provided by registered users according to the experiences they want to share with others.

The objective of the PATH project is to create a web application which helps travelers to get detailed information about any route or place. The following are the major system purposes:

- Register user in PATH web site.
- Suggest the suitable advices for different routes or places according to user preferences.
- Store advices given by users.
- Store advice types entered by users.
- Manage advice entry conflicts.
- Allow Administrator to manage conflict parameters

3. Organization

3.1 Project Manager

The project manager was chosen by team members. The project management involved proper work distribution and check whether we are on track with the planned activities.

3.2 Project Group

In order to define more related tasks and also to encourage all members to be more active during the project, we considered a “Main Responsibility” for each person. Each member took several tasks mostly in his area and helped the project manager for task definition in his scope. Members were able to help each other when needed. Table below shows project team members and main responsibilities during the project.

Name	Initials	Main Responsibility
Mostafa Pordel	MO	Project Manager
Anand T A	AN	Document Manager
Beulah Vineela P	BE	Project Tester
Abhishek Palod	AB	Development Manager
Riasat Abbas	RI	BTW-PATH Designer
Nicholas Cockran	NI	Customer Manager
Mikael Forsgren	MI	Researcher

3.3 Steering Group

Name	Email Id	University
Ivana Bosnic	ivana.bosnic@fer.hr	Zagreb University Supervisor
Aneta Vulgarakis	aneta.vulgarakis@mdh.se	MDH University Supervisor
Ivica Crnković	ivica.crnkovic@mdh.se	MDH University Professor

3.4 Customer

Stephen Fickas is a SCORE customer. (fickas@cs.uoregon.edu)

3.5 Others

Others include our DSD course supervisors Rikard Land, Igor Čavrak, Mario Žagar, Ana Petričić and customers who have given their valuable feed back the survey which is conducted as part of project.

4. Milestones

Id	Milestone Description	Responsible Dept./Initials	Finished week			Metr.	Rem.
			Plan	Forecast Week +/-	Actual		
M001	Project plan	MO	45	0	45		
M002	Requirement plan	NI	45	0	45		
M003	Project policies	MO	45	0	45		
M004	Project design	RI	47	0	47		
M005	Installation and Configuration	AN	47	+1	48		
M006	Interaction with Google API	AN	48	0	48		
M007	Code Development	AB	50	+2	52		
M008	Testing and debugging	BE	51		1		
M009	Final presentation	All	3		3		
M010	Final documentation	All	3		3		
M011	Final delivery	All	3		3		

5. Project Results

5.1 Requirements

5.1.1 Requirement Compliance Matrix

Id	Requirement Description	completed	Rem
	Project core		
USR-1	Find route from point A to point B	Yes	
USR-2	Seek advice on the map to travel	Yes	
USR-3	Register and login	Yes	

USR-4	Update personal profile	Yes	
USR-5	Save their filter settings to save time	Yes	
USR-6	Filter advice	Yes	01
USR-7	Add advice profile based on their experience	Yes	
USR-8	Add new advice template	Yes	02
USR-9	Add comments in web log of a location in map	Yes	
USR10	Refute or approve previous comments	Yes	03
Manager of BTW-PATH-PATH			
BTW-PATH-PATHM-1	Manage conflicts	P	04
BTW-PATH-PATHM-2	Manage comments	P	05
BTW-PATH-PATHM-3	Set effects of dynamic features	No	
System administrator		P	
SADM	Manage managers	P	06

Completed: Yes (completely implemented)

No (not implemented at all)

Partially (partially implemented, more description under Remarks subsection)

Unknown (completion status not known)

Dropped (requirement was dropped during the course of the project)

5.1.2 Requirements Compliance Summary

Total number of requirements	14
Number of requirements implemented	11
Requirements partially fulfilled	02
Requirements not fulfilled	1
Requirements dropped	0

5.1.3 Remarks

Remark Id	Description
01	We added this requirement for matching the exact user requirements. When the user enters his desired location in PATH web site then it filter the most suitable matching advice routes and showing only these filter advices.
02	We added this requirement for inserting the advice in PATH web site with the some requirement such as user enter his name, inset two points and comments. This edit format provides the platform for user to enter the advice in proper format.

03	We added this requirement for checking the correction of the user experiences travel advice.
04	This is the added requirement for managing the conflict of different advices when different users enter different advice for one location. When any advice changes two times in one day then manager will check the conflict and resolve the conflict in advice.
05	This is the added requirement for managing the user comments similarly to managing the conflict
06	This is added requirements for administrator to manage the different region manager

5.2 Work Products and Deliverables

To	Output	Planned week	Promised week	Late +/-	Delivered week	Rem
Customer	Project plan presentation	45	45	0	45	
Steering group/ Team members	Requirements definition	46	46	0	46	
Steering group/ Team members	Project plan& description	46	46	0	46	
Steering group/ Team members/ Customer	Project design	47	47	0	47	
Customer	Project design presentation	47	47	0	47	
Customer	Project status presentation	50	50	0	50	
Steering group/ Team members	Final project report	03	03	0	03	
Customer/ Steering group	Final presentation	03	03	0	03	
Steering group/ Customer	Final delivery	04	04	0	04	
Steering group	Summary Week Reports every week, starting week: 45					

5.2.1 Remarks

Remark Id	Description
01	Filter advice

6. Project Experiences

6.1 Positive Experiences

SCORE competition was really a good chance we had during this project. We prepared a report for SCORE. And we received four feedbacks from Ivica and Ivana for it. The main positive point about the DSD course and project was the lots of feedbacks we got from steering group and also other teams. Group working under a shelter of a supervisor that was on the other site was another positive point of DSD course and project.

6.1.1. Communication

Team members are from different countries and each has a different background and culture. We are from Iran, Australia, Pakistan and India. We spent some times to improve mutual understanding. Communication is main factor in distributed development project. We used several ways to communicate, we had weekly group meetings in university, we had our own Google group and we used e-mails for sending some important information. . Mostly we used voice to communicate with our supervisor in Zagreb site. For some few sessions we used video too. For remote site we used Skype tools while locally we prefer using Google environment including mail, document, calendar, groups and chat.

6.2 Improvement Possibilities

6.3.2. Technical problems

In the beginning we started working on this project when we were not aware what kind of technical problems occurred in the development. During the development we had problems for setting the same platform or installation all the required tools which required the project implementation but some member could not installed and configured these tools on their local machines which caused loosing hours of our time and then we decided to use the remote platform setup.

So next time we would spend more time to prepare our working environment better to avoid these problems and select the better platform.

7. Financials

7.1 Project Cost Summary

Planned Cost	38500\$
Actual Cost	25780\$

7.2 Work per Member

Member	W45	W46	W47	W48	W49	W50	W51	W52	W01	W02	Total
MO	21	24	24	20	29	20	22	25	25	28	238
AN	22	20	24	19	24	25	22	21	21	28	226
RI	21	23	24	18	19	22	23	20	22	25	217
BE	22	22	24	21	22	22	24	0	11	26	194
MI	21	20	16	5	0	NIL	NIL	NIL	NIL	NIL	62
AB	21	22	24	19	22	23	22	20	22	25	220
NI	13	15	14	14	14	18	18	0	10	16	132
Total	141	146	150	116	130	131	131	86	111	148	1289

8. Metrics

8.1 Milestone Metrics

Completed as planned or earlier	Total	Timeliness
12	14	85%

8.2 Effort Metrics

Activity	Actual Effort	Planned Effort	Deviation (%)
Project plan	141	175	
Requirement plan	120	140	
Project policies	30	35	
Project design	150	175	
Installation and Configuration	60	30	
Interaction with Google API	116	175	
Code Development	392	525	
Testing and debugging	86	160	
Final presentation	2	5	
Final documentation & SCORE report	69	60	
Final delivery	50		

Effort estimation accuracy (%) <i>(100*(1 - abs(Actual - Planned)/Actual))</i>	84%
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