

Institiúid Teicneolaíochta Cheatharlach



At the Heart of South Leinster

Project Plan: Code Editing in the Cloud

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INDEX:

1. Introduction.....	3
2. Project Organization.....	4
2.1. Gantt Diagram.....	4
2.2. Iterations Schedule.....	6
3. Project Iterations.....	7
3.1. Iteration 1.....	7
3.1.1. Key Milestones.....	7
3.1.2. High Level Objectives.....	8
3.1.3. Work Items.....	8
3.1.4. Evaluation Criteria.....	8
3.2. Iteration 2.....	9
3.2.1. Key Milestones.....	9
3.2.2. High Level Objectives.....	9
3.2.3. Work Items.....	10
3.2.4. Evaluation Criteria.....	10
3.3. Iteration 3.....	11
3.3.1. Key Milestones.....	11
3.3.2. High Level Objectives.....	11
3.3.3. Work Items.....	12
3.3.4. Evaluation Criteria.....	12
3.4. Iteration 4.....	13
3.4.1. Key Milestones.....	13
3.4.2. High Level Objectives.....	13
3.4.3. Work Items.....	14
3.4.4. Evaluation Criteria.....	14

1. Introduction:

This project would be developed in an agile and iterative context. Every Iteration would produce a functional application that would add some new features to the release from the previous iteration. At the end of the last iteration, the final application would have been developed and fully tested.

Feedback of the previous work would be achieved in following iterations. Every work product of an iteration will include the previous work product modified to generate the new one. That means that if a new error/bug in the previous iteration is discovered in the current iteration, it will be fixed without affecting the schedule.

Schedule is based on project deadline, but some iterations have included tasks to fulfil partial deadlines (like documents or presentations)

The schedule for the plan is provided in a Gantt Diagram for all the tasks of the project that would show the relation between tasks.

It would also be provided every Iterations schedule, that would show tasks to be made in that iteration.

2. Project organization:

2.1. Gantt Diagram

ID		Task Name	Duration	Start	Finish	Predecessors
1		Iteration 1:	20 days	Mon 14/12/09	Fri 08/01/10	
2		Application Design	15 days	Mon 14/12/09	Fri 01/01/10	
3		Model-View-Controller St	10 days	Mon 21/12/09	Fri 01/01/10	
4		Data Base Specification	5 days	Mon 04/01/10	Fri 08/01/10	3
5		Views Implementation	5 days	Mon 04/01/10	Fri 08/01/10	3
6		Controllers Partial Implem	5 days	Mon 04/01/10	Fri 08/01/10	3
7		System Call Handler	10 days	Mon 28/12/09	Fri 08/01/10	
8		Web Page	10 days	Mon 28/12/09	Fri 08/01/10	
9		User Manual	10 days	Mon 28/12/09	Fri 08/01/10	
10		Test	3 days	Wed 06/01/10	Fri 08/01/10	
11		Basic Application	0 days	Fri 08/01/10	Fri 08/01/10	1
12		Web Page	0 days	Fri 08/01/10	Fri 08/01/10	1
13		User Manual	0 days	Fri 08/01/10	Fri 08/01/10	1
14		Design Document	0 days	Fri 08/01/10	Fri 08/01/10	1
15		Iteration 2:	20 days?	Mon 11/01/10	Fri 05/02/10	1
16		Views Modification	15 days	Mon 18/01/10	Fri 05/02/10	5
17		Controllers Modification	15 days	Mon 18/01/10	Fri 05/02/10	6
18		Users	20 days	Mon 11/01/10	Fri 05/02/10	
19		Sessions	20 days	Mon 11/01/10	Fri 05/02/10	
20		Project Presentation	15 days?	Mon 18/01/10	Fri 05/02/10	
21		User Manual	15 days?	Mon 18/01/10	Fri 05/02/10	9
22		Test	3 days	Wed 03/02/10	Fri 05/02/10	
23		Full Application No Highlight	0 days	Fri 05/02/10	Fri 05/02/10	15
24		Project Presentation	0 days	Fri 05/02/10	Fri 05/02/10	15
25		User Manual	0 days	Fri 05/02/10	Fri 05/02/10	15
26		Iteration 3:	20 days?	Mon 08/02/10	Fri 05/03/10	15
27		Lexer	15 days	Mon 08/02/10	Fri 26/02/10	
28		Views Modification	15 days	Mon 15/02/10	Fri 05/03/10	16
29		Controllers Finished	15 days	Mon 15/02/10	Fri 05/03/10	17
30		User Manual	10 days?	Mon 22/02/10	Fri 05/03/10	21
31		Test	3 days	Wed 03/03/10	Fri 05/03/10	
32		Application with Highlight (No	0 days	Fri 05/03/10	Fri 05/03/10	26
33		User Manual	0 days	Fri 05/03/10	Fri 05/03/10	26
34		Iteration 4:	15 days?	Mon 08/03/10	Fri 26/03/10	26
35		Views Finished	15 days	Mon 08/03/10	Fri 26/03/10	28
36		User Manual	10 days?	Mon 15/03/10	Fri 26/03/10	30
37		Project Report	15 days?	Mon 08/03/10	Fri 26/03/10	
38		Test	3 days	Wed 24/03/10	Fri 26/03/10	
39		Final Application	0 days	Fri 26/03/10	Fri 26/03/10	34
40		User Manual	0 days	Fri 26/03/10	Fri 26/03/10	34
41		Project Report	0 days	Fri 26/03/10	Fri 26/03/10	34
42		Full Application Test	5 days	Mon 29/03/10	Fri 02/04/10	34

ID	Task Name	Duration	Start	Finish	Predecessors
1	Iteration 1:	20 days	Mon 14/12/09	Fri 08/01/10	
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22	Test	3 days	Wed 03/02/10	Fri 05/02/10	
23	Full Application No Highlight	0 days	Fri 05/02/10	Fri 05/02/10	15
24	Project Presentation	0 days	Fri 05/02/10	Fri 05/02/10	15
25	User Manual	0 days	Fri 05/02/10	Fri 05/02/10	15

ID	Task Name	Duration	Start	Finish	Predecessors
26	Iteration 3:	20 days?	Mon 08/02/10	Fri 05/03/10	15
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40	User Manual	0 days	Fri 26/03/10	Fri 26/03/10	34
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42	Full Application Test	5 days	Mon 29/03/10	Fri 02/04/10	34

2.2. Iterations Schedule:

Iteration	Related use cases	Schedule
Iteration 1	CRUD File, CRUD Project, Export File, Export Project	from 14/12/2009 to 08/01/2010
Iteration 2	Log-in, Mange Users	from 11/01/2010 to 05/02/2010
Iteration 3	CRUD File	from 08/02/2010 to 05/03/2010
Iteration 4	CRUD File	from 08/03/2010 to 02/04/2010

3. Project Iterations:

3.1. Iteration 1 (from 14/12/2009 to 08/01/2010):

In this iteration a first version of the product would be built. The first step would be designing the application. Scaffold would be use to generate the application skeleton. Data bases would be created. Views and controllers would be modified to provide exporting functionalities. Views would be improved in its appearance by modifying them and using css files.

In the released version, projects as well as files will be able to be created, edited stored and exported. There would be no restriction in users or rights. The application look will be nice and enjoyable very similar to the look of the final version of the application.

In this iteration a web page would be created, so there is an online official site, that would allow potential users know the state of the project.

An user manual would be written in this iteration. This manual would be modified in every iteration with new functionalities to produce the final user manual.

3.1.1. Key milestones:

- Application Design
- Model-View-Controller Skeleton
- Data Base Specification
- Views implementation
- Controllers partial-implementation.
- System Call Handlers
- Web Page
- User Manual
- Test

3.1.2. High-level objectives:

- Designing our application.
- To start implementation by creating an skeleton and a basic code, that would work as an independent application.
- Make views attractive and enjoyable.
- Creating classes that would manage system calls to export files.
- Modify Controllers to integrate new views and new exporting functions with the existing model.
- Create a web page
- Create a User Manual

3.1.3. Work Items:

Name or key words of description	Priority	State at the end of the iteration	Complexity
Design	High	Finished	High
Application Skeleton	High	Half-Done	Medium
Data Base (Model)	Medium	Half-Done	Low
Views	Medium	Half-Done	Medium
Controllers	Medium	Half-Done	Low
Exporting functions	Medium	Finished	Medium
Web Page	Low	Finished	Medium
User Manual	Low	Started	Low
Partial Test	High	Finished	Medium

3.1.4. Evaluation criteria

A Java application can be stored, edited, compiled and exported in the application.

3.2. Iteration 2 (from 11/01/2010 to 05/02/2010):

In this iteration user management and sessions functionality would be added to the previous version. As a consequence model views and controllers would be modified to handle users. At the end of the iteration a functional application capable of creating and managing users and projects depending on each user rights would have been created.

The project Presentation would be created showing an overview of the application. This version of the application could be shown in the project presentation as an example that can let us see how our application would be with all features but code highlighting.

User Manual would be modified to include new functionalities

3.2.1. Key milestones:

- Views modification
- Controllers modification.
- Models finalization
- Users
- Sessions
- Project Presentation
- User Manual
- Test

3.2.2. High-level objectives:

- Updating Views
- Updating Controllers.
- Updating Model.
- Creating classes that would handle user and sessions.
- Creating Project Presentation
- Updating User Manual

3.2.3. Work Items:

Name or key words of description	Priority	State at the end of the iteration	Complexity
Application Skeleton	High	Almost finished	High
Views	Low	Half-Done	Low
Controllers	Medium	Almost Finished	Medium
Model	Medium	Finished	Medium
Users and Sessions	High	Finished	High
Project Presentation	Low	Finished	Low
User Manual	Low	Half-done	Low
Partial Test	High	Finished	Medium

3.2.4. Evaluation criteria

Users can be created and managed. Only authorized users can access to certain functionalities.

3.3. Iteration 3 (from 08/02/2010 to 05/03/2010):

In this iteration a Lexer (Lexical Parser) would be created in our application. This automaton (the lexer) would be capable of identify all Java kind of tokens, reserve words, etc. This Lexer would be integrated to highlight code.

At the end a full application with all the features would have been developed but code highlighting will not be automatic.

User Manual would be modified to include new features.

3.3.1. Key milestones:

- Lexer
- Views modification
- Controllers finished
- Users Manual
- Test

3.3.2. High-level objectives:

- Creating classes for the automaton(Lexer).
- Modify views
- Finish controllers.
- Integrating the Lexer in the editing view.
- Updating User Manual

3.3.3. Work Items:

Name or key words of description	Priority	State at the end of the iteration	Complexity
Application Skeleton	High	Finished	Medium
Views	Medium	Almost Finished	Low
Controllers	High	Finished	Medium
Lexer	High	Finished	High
User Manual	Low	Almost Finished	Low
Partial Test	High	Finished	Medium

3.3.4. Evaluation criteria

The application should be able to determine the kind of token for every word in a Java application stored in the application.

The application should be able to highlight Java source code (not automatically).

3.4. Iteration 4 (from 08/03/2010 to 26/03/2010):

Editing views would be modified to use AJAX to automatically highlight code. This is the final iteration, our application would be finished. The User manual for the application would also be Finished.

Project Report document would be created in this iteration.

3.4.1. Key milestones:

- Views finished
- User Manual
- Project Report
- Test

3.4.2. High-level objectives:

- Modify views.
- AJAX integration
- User Manual
- Project Report

3.4.3. Work Items:

Name or key words of description	Priority	State at the end of the iteration	Complexity
Views	High	Finished	High
User Manual	Low	Finished	Low
Project Report	Medium	Finished	Medium
Partial Test	High	Finished	Medium
Full Test	High	Finished	Medium

3.4.4. Evaluation criteria

The application should be completed, all test should be passed and the application should be ready to be deployed in every suitable system. Every user for who this application is destined to, should be able to use the application, with the guidance of the application Manual.