Plan de développement

Zohour Abouakil
Sofia Boutahar
David Courtinot
Xiaowen Ji
Fabien Sauce

Recherche de motifs dans un code C++ à l'aide de la logique temporelle

Sommaire

Partie I

Project description and objectives

I.1 Surroundings of the project

Le projet long à l'ENSEEIHT Organisation du projet

Le client c est qui ? ? Les noms, leurs fonctions, les motivations du projet

Nos motivations – pas sur

I.2 Project description

I.2.1 Main idea

I.2.2 Related technologies

— Coccinelle
— Clang

I.2.3 Project parts

— Parser
— CTL
— Model checking

I.2.4 To conclude

I.3 Final project

I.3.1 Define priorities

I.3.2 Deliverable documents

Partie II

Project organization

II.1 Role definition

Project manager

Quality manager

Test manager

Test manager

Configuration manager

Documentation manager

Chain development

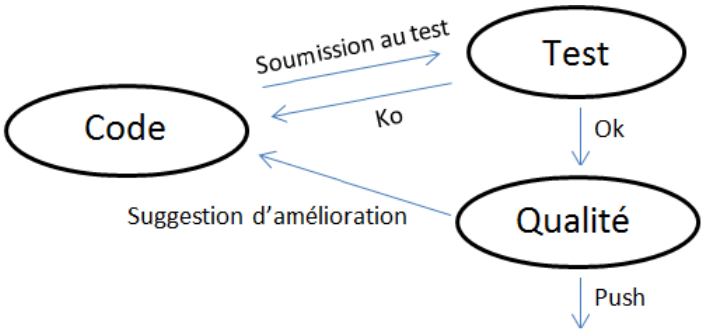


Figure II.1 - Schéma descriptif de la chaîne de développement

II.2 Development organisation

To secure our evolution we can use :

II.2.1 Use of Scrum method

We will try to use Scrum method, which is actually widely used, and recognised for its effectiveness. At first, we will define a *product backlog* containing all desired functionalities in the final product. In fact, this report is also a part of *product backlog*. Next, we will divide the project into three *sprints* (which means iterations). A *sprint backlog* is defined for each *sprint*, including all we need to realise at the end of an iteration. Each *sprint* lasts two weeks and lies in improve the software incrementally, so that it is close to *product backlog*.

II.2.2 Team repartition approach

II.3 Tasks organisation

II.3.1 Tasks definition

II.3.2 Planning

Légende :

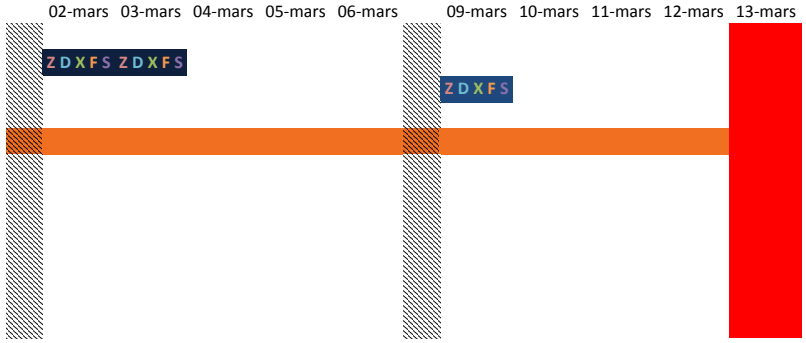
Ressource	Rôle
Zohour Abouakil	Chef de projet
David Courtinot	Responsable qualité
Xiaowen Ji	Responsable de la gestion de configuration
Fabien Sauce	Responsable de la documentation
Sofia Boutahar	Responsable des tests

Tâches récurrentes :

- Design review
- Code review

Itération 3 :

- Implémentation Model Checking 3 (VF)
- Implémentation conversion AST to GFC 3 (VF)
- Validation séparée :
  - jeu de tests MC 3
  - jeu de tests AST/GFC 3
- Validation du produit mergé



Partie III

Risk management

Date	Risk description	Consequences	Type of risk	Probability (1-5)	Impact level (1-5)	Weight	Preventive mesure
27th, January 2015	Communication problems : lack of communication, misunderstanding, etc	Unproductive group, non-respect of the interfaces necessary to compatibility	Human resources	5	5	25	Be sure we agreed with our teammates before starting a part
27th, January 2016	Underestimation of the development time	Deadline exceeded / late delivery	Scope of project	4	5	20	Supervisor able to switch from one task to another and have a global vision
27th, January 2017	Wrong or unappropriate assumptions during the analysis	Unexpected edge cases difficult to handle with our model	Development method	5	4	20	Validate the conception by the client
27th, January 2018	Customer's requirements not respected	Product not accepted by the client	Client requirements	4	4	16	Having some meetings with the clients every weeks and making them validate our steps
27th, January 2019	Bad design choices at the beginning, issues to make the model evolve, corner cases...	Problem to make the project evolve, waste of time to readapt the conception to the new requirements	Quality	3	5	15	Allocate several days to conception and ensure everyone is convinced by the design
27th, January 2020	Health problems : a member of the team getting sick, etc	In the best case, redefine the other team member role. Otherwise, the product will be late.	Scope of project	2	5	10	Flexible schedule
27th, January 2021	Underestimation of the learning curve, different time learning among the team	Delays, different rhythms for the various parts of the project	Scope of project	3	3	9	Create balanced teams (people better trained with people less trained)
27th, January 2022	Appearance of bugs that we cannot fix	Unable to meet certain requirements	Quality	2	4	8	Restart the task with another approachs and change the people affected to this task

Partie IV

Code management

IV.1 Quality management

IV.1.1 Automated coding style checks

For ensuring that our coding rules are respected and evaluate the quality of our sources, we have used a tool called *Scalastyle* that enables, using an easy-to-use xml configuration file, to check some properties on a Scala code. Combined with a specific pulgin, this can be use to generate warnings or errors in the IDE the developer is using. Our settings can be found in appendix A.

IV.2 Test strategy

IV.3 Configuration management

Partie V

Appendices