Assignment of Project Management course "Hospital management system" - HMS

Report for iteration 2

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Mar 28th 2012

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Introduction

- In 2nd iteration, we are planed:
  - Design test
  - Develop two first functions
    - Database
    - Source
  - Refactoring
  - Change project plan to match with actual tasks
  - Apply XP practices to project
  - Build automatic build, version control and interaction system

Second iteration

- In second iteration, we keep each member's role are
    - Manager: NGUYEN Huu Phat
    - Tracker and tester: NGO Minh Anh Thu
    - Programmer: LE Xuan Hoan and TRAN Le Nhu Quynh

Setup development and testing environment

- Setup HUDSON
  - Already setup HUDSON in local PC
  - Do not have server and static IP address to setup HUDSON online
  - Refer to "TRAN Le Nhu Quynh_RoleProgrammer_Iteration2.pdf" for details
- Setup MAVEN
  - We also setup MAVEN in each PC instead of using ANT
  - MAVEN is easy to use

Task have been done

- Re-plan project
  - Changed deadline of some tasks
    - We have three more projects must be done in this and next month
    - Some new tasks are raised and should more time to do: setup MAVEN, HUDSON
  - Redefined order of task
    - Change priority of task
    - Add some tasks about testing into project plan

Task have been done

- Implement database
  - Use SQLite database with "SQLite Maestro" as management tool
  - Create table in database
  - Input test data to database
- Advantages of SQLite
  - Easy to use
  - Database file is small
  - Save resources
- Disadvantages of SQLite
  - Must use third-party software like SQLite Maestro to manipulate database easier
  - SQLite does not support write store procedure

Task have been done

- Design test case
    - As XP methodology practices, after define classes and methods in each class, we make some unit test by using JUnit and Easymock in project
    - Because we do not have a well design and a few experiences in XP, so unit test must be changed during this iteration
    - Refer to "NGO Minh Anh Thu_RoleTracker_Iteration2.pdf" for details

Task have been done

- Implement software functions
  - We build some functions for this project as client request in last iteration
    - Login
    - Register new patient
    - Lookup patient information
    - Assign nurse to patient

Task have been done

- Refactoring
  - After programmers implement functions in project and commit it to github, tester clone it to local repository and run test to verify code
  - We also do some refactor actions for this project like rename class and variable, change an architecture...

Advantages

- Some advantages when apply XP methodologies to our project
  - Small release
  - Simple class and methods
  - Test case are created before implement phase, so easy to check method right while coding

Disadvantages

- It also have some disadvantages for us in second iteration
  - Sometimes we do not follow XP practices, some code are implement without unit testing
  - Do not setup meeting frequently (everyday), but we send us email everyday or setup online meeting
  - Do not have a server to setup HUDSON online
  - Sometimes github with Eclipse has problem, so we must search solutions for its

Solutions

- We suggest some solution for disadvantages point, to improve project in next iteration
  - Try to apply XP practices to this project
  - Impove management ans development skills
  - Ask some help from university to setup HUDSON online
  - Study more about github

Plan for next iteration

- Change team members' role

- Develop business logic layer for functions

- Generalize class to abstract for interface for extend system later

- Apply some design pattern to this project to improve design and system architecture

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End.