

University of Herat
Faculty of Computer Science
Methodic and Practical Foundation of Computer Science
Click Team



JMySQL

Project Documentation

click.hubuntu-af.org
jmysql.sourceforge.net

About Us:

This is click Team of Computer Science Faculty of Herat University, it consist of six students from fifth semester.

The main target is going arroud Software Engineering subject.

Related Teacher: Mr.Shafee Tokhi

Project Manager: Mr.Sadeq Zabihi

Name	ID	Email
Waheeda Hamkar	20325	golden_woman25@yahoo.com
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For management purpose of group working and team members, we have a private project hosted in sourceforge.net which provides mailing list, forum, subversion, file manager for members.

jmysql.sourceforge.net

Team members have daily meetings from 12 to 12:30 pm in Admin room or library of Computer Science faculty.

Team email address: click@hubuntu-af.org

First week project details and documentation:

The initial steps was providing a meeting for selecting a proposal and finding a name for that. Consequently after consulting with other members of group , we came up with ITCH Registration project and group name **Click**.

When initials steps was finished for making weblog members of group took decision which Mr Sadeq Zabihi allocate a page from Hubuntu site and named **click.hubuntu-af.org** Designing the page and making a mail for group was another responsibility which was associated with him.

Another activity was making a private project in sourceforge under name of Jmysql which provides mailing list, forum, subversion, file manager for members of group.

As we told before the idea of project is a registration database with Java front end for GUI user intraction with the system.

Going through Software Engineering process, we start Requirements Engineering with requirement elicitation and analysis.

At the beginning we provided an interview with Mr Jahid Zahir (ITCH responsible of Administrative Department) and we asked our question and necessary requirements about mentioned project.

Task of each person during this week was as following:

Make an email, sourceforge, weblog and design by Mr. Sadeq Zabihi

Team introduction by Ms. Lalah Azar

Project Description by Mr. Hasen Islamy

List of functionalities by Mr. Hamid Reza Zarsazan and Anita Afzali

Documentation by Ms. Waheeda Hamkar

Second week project details and documentation:

Abstract:

During second week of project, we focused more on user specifications and continue requirement elicitation by interview with two person which are currently working in ITCH and then working on new scenarios.

New finding has been earned about system and user requirements by these interviews and are written descriptively in the report.

Introduction:

Activities which have been done in second week of project are mostly concern about users and its requirement, so we create a user profile which discusses basic user needs.

Regarding to requirement elicitation, team has been continued interviewing with two new person which are currently working in ITCH. results of new interviews are going to influence our main application.

New scenarios are generated for system and users.

We are continuing our daily meeting and in first day of assignment, each task will assign to one of team members.

We started also some draft paper prototyping in this week, so we could have a better understanding and clear view of our programs.

Tasks have been done by:

User Profile Mr.HamidReza Zarsazan

Description of interviewed user Mrs.Waheeda Hamkar

Interview Mrs.Waheeda Hamkar, Mrs.Lalah Azar, Mrs.Anita Afzali

Interview question and asnwers Mrs.Waheeda Hamkar, Mrs.Lalah Azar

Design modification Mrs.Lalah Azar

Registration Scenario Mr.Hasen Islamy

Docuemntaion, Abstract and Intro Mr.Sadeq Zabihi

User Profile:

Date: May 13, 2010

Name: Samer

Father Name: M. Javed

Last Name: Najrabi

Country/Region: Afghanistan

City: Kabul

State/Province: Kabul

Nationality: Afghan

Language: Dari

Gender: Male

Date of Birth: June 16, 1988

Interest: Internet

Primary Education: Inghlab High School

High Education: Computer Science Faculty

University Position: Computer Science Student

Semester: 7th

Job: ITCH Admin

Experiences: 2004-2006 worked as Computer Technician, 2006-2009 served
as Computer Science Administrator, After 2009 working as ITCH Admin

Skills: Networking, IT, Windows, Ubuntu, Hardware Technician, A little
Graphics

Mobile Number: 0799405060

Email: samer.najrabi@gmail.com

Full Address:

Afghanistan, Herat,

Mabas Street,

Second Sub Street,

Home Nu. 5

A brief description of interviewed users:

1. Mr Jahid Zahir is Administrative and Manager of ITCH. He has passed his primary and high education (High School) in Herat. After passing the Cancore Exam successfully, he could enter to university as computer science student. He could finish computer science faculty about 5 years -by many facing problems- and now he is responsible of ITCH Administrative Department in Herat university. we asked our question and necessary requirements about mentioned project.

2. Mr. Abdul Rahman Vakili is one of the computer science faculty lecturers. He passed his primary education in mathematic & physical subject in Iran. After that he could success ed in the field of engineering, but he couldn't continue because of emigration from Iran to Afghanistan, so he followed his high education in computer science faculty for 4 years in Herat university, in this duration he was responsible of technical Administration. He was one member of the first Administrator group who also was selected as the Head of Administrators. Since 2008 till 2010 he has passed his master degree in the subject of Network Architecture and Resource Management in Germany. His personal activities can be contained working with three extended

1. Siemens business Office of Germany (IT Officer about two years)
2. Computer servant Office of Kanada (IT Manager about two months)
3. Working in Zune Gharb office in technical section

ITCH Registration Scenario:

Scenario A.

Waheed is an administrator in ITCH, he is responsible to register university students, staff and teachers for ITCH.

One day one of students (Reza) come to him and tells him he wants to use ITCH equipments. Waheed tells him that first of all he must be registered, and gives him a registration form. Then Reza fill in the blanks and gives back the form to Waheed, Waheed tells Reza to stay for his ITCH ID card.

Waheed has a system registration on his PC called ITCH registration; he opens this GUI software to registers Reza as a user in ITCH, after software is opened he click on a button named (add user), after he clicks add user then a registration GUI form gets open that include all details which was on the paper form.

Then he fills in the blanks and after he is finished with that then press a button named submit while he presses that button the data will be stored in our Data base (My SQL). He asks Reza to stay for a while to get his ITCH ID card.

Then Waheed press a button beside submit button named print card, after he presses the button Reza's ID card is printed. Every day Waheed do the same task for any student or university staff that wants to be a user of ITCH.

Scenario B.

After a long time one of registered students comes to Waheed (admin) and tells him that he lost his ITCH ID card mobile phone and now he doesn't have ID card and also he has new phone number.

Waheed tells him no problem after that Waheed asks his name, and then he says my name is Ahmad and my ID was 1500, Waheed opens the ITCH registration system and click on search/Edit button, then he writes Ahmad's name and ID number, after a while Waheed sees the search result then he clicks on Ahmad's name and press Edit button which is located down there, then he asks for his new phone number, after he enter Ahmad's new phone number then press print card button which is located down there and after a while card is printed and he gives the card to Ahmad.

Interview questions and user answers:

1. Asked Questions from Mr. Abdul Rahman Vakili in interview.

Asked about Biography?

He gave short information about himself, I am Abdul Rahman Vakili graduated from computer science faculty in 2007 then I get my master degree from Technical university of Berlin between 2008 to 2010 and now I am lecturer of computer science faculty and Head of ITCH.

What kind of application you need for Registration?

He said: we have LDAP system for authenticate and we use from MMC for registration. And we want you to create a database and synchronize it with this system.

What kind of functionalities you need for system?

We need this database that can make list of users survey and search it. It is consist of categories teachers, students and faculty staffs.

What kind of security or ways you need for your software to save data?

Said : we have security for this system our system is based on SSL and also we use firewall and trace back to save all information about users when and who login to system.

What kind of design they have in mind for their work about (forms)?

He said: with this system we have a list of all our users search easier survey

the users and it is more secure and sufficient than hard copy.

What is their benefits by using this software?

We can be able to search , block and control users and have obviously and complete management.

2. Asked Questions from Mr. Jahid Zahir in interview.

Asked about Biography?

I am Jahid Zahir graduated from computer science faculty and now I am responsible of ITCH administration.

Do you save the hard copy of registration forms?

No we don't need if we have its soft forms.

What information except user of personal information should be stored in the database section?

We also want to create an ID card for user it is consist of this information. They had a registration form and wrote all points that they want, to know about users like: Name, ID etc and etc.

Short summary of new findings:

Interview with Mr. vakili teacher of computer science faculty.

we had an interview with Mr.vakili about our project which is an registration database with Java interface for ITCH to registration of the members who

want to use from ITCH facilities. The main point of interview is as follows: 1.

We have a mysql server for registration of:

- a. Teachers
 - b. Students
 - c. University Staff
2. The program will print a card for user with name, id and photo.
 3. The program can search users by name, ID, faculty name and by his/her email address.
 4. We don't need to signature and Photo because we store hard copy of registration form.
 5. We don't need security for our system, because server has internal and external firewall.

New findings and changes:

There are some new points that we get from this interview and change this project.

Categories of users: they have three categories it is consist of teachers, students and university stuffs, every categories has his or her own account in this project. we have three categories in one table and we use radio button for this categories.

Second: They have mail option on registration form and it generate automatically.

Third: they save the hard copy of registration form and don't need photo and signature in database but we add the photo in database.

Fourth: about security customer use different kind of software and hardware for security they use SSL, firewall and trace back for security of project.

Fifth one: ID card was another point that we get it.They want to have ID Card for every user it added in this project.

Third week project details and documentation:

Abstract:

In third week of project, main purpose of assignment was about role of user in system interaction, clarifying classes, methods and attributes, and their relationships with each other.

Introduction:

During third week of project, members main concern was about completing Object Oriented Analysis Process, user specifications and interaction methods.

By writing scenario, drawing usecase and CRC, we are clarifying the state of our application. The classes which have been used in whole project, attributes and methods.

Tasks have been done by:

Documentation Mr.HamidReza Zarsazan

Subsystems Mrs.Waheeda Hamkar

CRC Mrs. Anita Afzali

Activity Diagram Mrs.Lalah Azar

Usecase Diagram Mr.Sadeq Zabihi, Mr.Hasen Islamy

SQA Mr.Sadeq Zabihi

Results:

Usecase Diagram

CRC Models

Subsystems

Activity Diagram 1

Activity Diagram 2

Usecase Digram

Usecase diagram for Jmysql application, includes all functional features.

CRC Models

CRC models for Jmysql project

UserForm
Responsibilities
close()
printCard()
Submit()
name
fatherName
lastName
dateOB
sex
position
faculty
department
semester
ITCHID
UniID
address
email
telNum

Main
Responsibilities
register
searchEdit
setting
aboutUs

SearchEdit
Responsibilities
search()
edit()
remove()

PrintCard
Responsibilities
printCard()

Handler
Responsibilities
submit()
remove()
edit()
search()

Fourth week project details and documentation:

Abstract:

In fourth week of project, the assignment was about paper prototyping and user (customer) interaction with these paper and entire system.

Because we had selected the Prototyping model as Software Development Process Model (**SDPM**) for our project, the team consideration was mostly about customer reaction according to mock-up or prototyped papers.

Introduction:

During previous assignments, we had several interview with customer and they have been asked about their needs and problems.

This week group members prepared pre-prototypes or first mockup of our application and User(s) are going to evaluate and interact with these paper which every paper is a part of our interface and the team members will record the user interactions and observations with these papers.

After user interaction here we got some changes on the pre-prototypes papers, so we redraw the paper prototypes again (second mock-up) and this would be more useful for the user rather than the previous prototypes, because it is included user needs.

Tasks have been done by:

Documentation Mr.Hasen Islamy

User Observation Mrs.Waheeda Hamkar

Meeting with Customer Mrs. Anita Afzali, Mrs.Lalah Azar

List of Changes Mrs. Anita Afzali

First Mock-up Mr.Sadeq Zabihi

Second Mock-up Mrs.Lalah Azar

SQA Mr.HamidReza Zarsazan, Mr.Sadeq Zabihi

User Observation:

In the user observation step we got some points from Mr. Vakili by evaluating first mock-up that are:

First he asked about Help and Setting section and we explained him that Help section help users to use application and Setting is a facility which enable Admin to change username, password and URL of JDBC driver from GUI interface.

He emphasized on Print ID Card, SearchEdit and RegistrationForm that these are too important for them

He also asked that what should they do if they want to delete a user, I made clear for him that just by clicking the remove button in SearchEdit class, they will be able to delete users.

He wanted some information about search button, we said that to searching a specific user for removing and editing or blocking a user you can use it.

List of Changes:

Because several endeavors has been done during information elicitation and user interview by our team, we just had few changes in our first mockup after user evaluation.

We removed two text areas in class UserForm (what do you know about IT and Expected time), because they were unnecessary and not important for user.

Old and new models are presented here with name of first and second mock-ups.

Fifth week project details and documentation:

Abstract:

An important part of each project is to create a Timeline to show how the project is going on and how it will cover the milestones.

In fifth week of our project, after prototyping with customer, we create a timeline for four weeks.

In each week we are going to cover a part for developing our main application.

Introduction:

During last week, we had a meeting with teacher, and talk about previous assignment.

We discussed how to improve quality of our software to have sufficient score for our homeworks so We are going to revise and adjust our previous tasks.

Our main concern in this week was about creating a timeline for our project which to be followed weekly and at the end have the application finished.

We have created Gantt chart and also described the whole milestones weekly in details.

Tasks have been done by:

Abstract Mr.Sadeq Zabihi

Documentation Mrs.Anita Afzali, Mr.Hasen Islamy

Previous HW revise Mrs.Waheeda Hamkar

PHW revise Mrs.Lalah Azar

PHW revise Mr.Hasen Islamy

Project Timeline Mr.Sadeq Zabihi

Gantt Charts Mr.Sadeq Zabihi

SQA Mr.HamidReza Zarsazan, Mr.Sadeq Zabihi

Project Timeline:

[Project Timeline \(Details\)](#)

[Project Gantt Chart \(html\)](#)

[Project Gantt Chart \(pdf\)](#)

[Project Timeline \(png\)](#)

Project Timeline (Details)

Jmysql Project Timeline

Elements one to four shows numbers of weeks which we are going to finish our project.

Start time of each weekly tasks is from start of the week (Saturday) till end of the week (Thursday).

1. Prototype Concept and Design Implementation

- It is a start point for coding, creating GUI classes for each prototype, connect classes to each other hence user could surf in GUI forms and whole front-end program.
- Working on database design and structure would be one of our task in first week.

2. Software Implementation I

- Java and Mysql connection I:
 1. working on class SqlHandler for making interaction between our Java program and Mysql database would be task of second week.

3. Software Implementation II

- Java and Mysql connection II:
 1. putting time for creating and testing class SqlHandler and its related methods.

- PrintCard class:

1. working on implementation of PrintCard class.

4. Testing, Deployment, Maintenance

- Testing

1. Execution of software with the intent of finding software bugs.

- Deployment

1. release and installation of program for customer.

- Maintenance

1. modification of software product after delivery to correct faults and to improve performance.