Project Plan

Advanced Software Paradigms

Project name:

Transgenic technology patent information management system

Distribution:

Group 9

Appendices:

Chang Li

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1. Overview

The primary goal of this project design is to realize the patent management system of transgenic technology. There are several function pages of this system, respectively, the pages of user registration, user login, user information management, patent information management, information registration and data statistics. Through management the database, this system enables to transfer data between different function pages. The project ultimately implements a system that efficiently manages information.

The main page of the system is the user account login page. Also, users who have not registered can register by clicking the registration button to register a new account. The system's usage rights are divided into administrators and ordinary users. Administrators can manage this patent information system. For example, administrators can perform patent information maintenance, patent information query, gene sequence management, user information management, legal information management, and comprehensive statistical analysis. Besides, on each subpage, the administrator can add, modify, delete, and bulk import information. Ordinary users can register, query, and change personal information.

1.1 Requirements

First of all, the team members will implement the design user interface. This part includes the system navigation bar design, the operation button design of each function page, the jump design between function pages, and user interaction prompts. Second, the team members are committed to database table design, using MySQL database to achieve data storage. The third and most important part of the project is to achieve the intended function of the information system. That is to achieve the function of user registration, login, general user information query, patent registration, management of patent information management, data statistics and so forth. Finally,

the team members will perform system debugging and write documentation information, such as the software feature manual.

2. Goals and Scope

2.1 Project Goals

Project Goal	Priority	Comment/Description/Reference
Functional Goals:	1	For details see the Project Requirements Specification
<User interface design>		
<User permission design>		
<User registration>		
<User login>		
<User information management>		
<Patent information management>		
<Information registration>		
<Data statistics>		
<Database design>		
Quality Goals:	2	
< run smoothly>		
<Achieve expected functionality>		
Constraints:	3	
<environmental>		
<appl. specific standards>		
<national standards>		

3. Organization

The George Washington University, School of engineering and applied science.

3.1 Resource Owners

Group members of the ninth group:

Chang Li, Shixuan Zhang, Yuting Wang

3.2 Receivers

Professor and classmate of CSCI-6221 advanced software paradigms.

3.3 Project Manager

Group members of the ninth group:

Chang Li, Shixuan Zhang, Yuting Wang

Role	**Organization: Group ninth**
Group member 1	Chang Li
Group member 2	Shixuan Zhang
Group member 3	Yuting Wang

4. Schedule and Budget

4.1 Work Breakdown Structure

Based on project goals and scope, define a Work Breakdown Structure. Define work packages and project activities.

4.2 Schedule and Milestones

Estimate the effort for the project activities and plan the activity sequencing. Then prepare the schedule that supports all of the required activities and complies with the resource plan. Define project milestones based on the chosen development strategy and on critical events in the project schedule. List the milestones and define clear milestone criteria to make milestones measurable.

Milestones	Description	Planned Date
M0	Start Project	<2019-03-01>
	Group meeting	<2019-03-02>
M1	Project Plan	<2019-03-03>
	Complete the project plan	<2019-03-04>
M2	Start Execution	<2019-03-04>
	UI design	<2019-03-05>
M3	Realization	<2019-03-06>
	Programming system functions	
M4	Improvement	<2019-03-16>
	Final improvement and modification of the system	
M5	system debugging	<2019-03-20>
	Final improvement and modification of the system	
M6	Close Project	<2019-03-25>

The Project Schedule is weekly updated by the Project Manager.

4.3 Budget

Calculate the required project budget based on cost estimates for project activities. Present the distribution of the budget over the whole project life. Prepare a resource plan specifying the project's need for human resources, as well as for other resources.

4.4 Development Environment

Languages: python

IDE: pycharm

Database: MySQL

System environment：2.9 GHz Intel Core i9

Operating system: MacOS

5. Risk Management

The plan also defines the mitigation and contingency measures and who is responsible for. The Risk Management Plan is updated weekly.

The following is a list of possible risks for a project:

(1) For technical reasons, team members were unable to complete the code implementation of the feature page on time.

(2) The database is not working properly, for example, user registration information cannot be successfully stored in the database.

(3) Data cannot be transferred between different function pages.

(4) Team members cannot able to solve the logical problem of the functions in the project.

(5) Team members have different views on the code implementation of the system in terms of technology.

References

Frese, R. (2003). Project success and failure: what is success, what is failure, and how can you improve your odds for success? Retrieved from http://www.umsl.edu/~sauterv/analysis/6840_f03_papers/frese/

Gulla, J. (2012). Seven Reasons IT Projects Fail. Retrieved from http://ibmsystemsmag.com/power/systems-management/workload-management/project_pitfalls/

What is management information systems? (n.d.). Retrieved from http://mays.tamu.edu/info/what-is-mis/

Delivering Business Analytics and Technology Solutions. (n.d.). Retrieved from https://saunders.rit.edu/undergraduate/majors-minors/management-information-systems-mis-degree-overview#

Boykin, G. (2017). The History of Management Information Systems. Retrieved from https://bizfluent.com/about-5444925-history-management-information-systems.html