



# FORUM

## SOFTWARE ENGINEERING PROJECT

PROJECT PLAN

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## 1. OVERVIEW

### Product's information

- The communication between each other people in modern social becomes essential, trading information will make people approach easily as well as improving or evaluating. From the past, people have already known trade information, things. For example, businessman trade goods, products to get profit or studies discuss together to find answer for a question. Therefore, the trades are very important.

Nowadays, in the Internet century, trade as well as communication between people is more and more flexible and various. With the appearance of social networks, a person can easily connect to people from everywhere in the World at one time to trade information, discussion, communication. That is the reason why we need a social network like **Forum**

The **Forum** is designed for everybody, which brings a place for them to interact, discuss, share experience, opinion, etc.

The **Forum** can be accessed from anywhere as long as having Internet and Internet Devices like mobile, computer, etc.

### Constrains

- a) Time: this project/product will be completed on 18th December, 2017 ( 8 weeks to deal with this project)
- b) Budget: When you want to create a product, budget is needed. In this product, we will need budget for Hardware, Software, Human and some Addition ( Unestimated) fees. This is a short planned budget
  - Hardware : 8100\$
  - Software : 600\$
  - Human : 8000\$
  - Unestimated fee: 1000\$Total : 17700\$

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## 2. SCOPE & OBJECTIVES

### 2.1 Objectives

#### 1. Functional

- A place for people interact, discuss, share, make friend, etc.
- Connect people
- Safe and peaceful forum for people
- Alert user when connecting to a unsafe link, document, etc.

#### 2. Business

- Advertising for sponsor
- Collect information of user

#### 3. Quality

- The UI should be friendly, approachable, clear
- Try to maintain information and often filter spams, bad things

### 2.2 Scope

#### 1. Included

##### Deliverable

For admin/mod:

- Modify database (threads/posts, members, comments)
- React to the threads/posts

For members

- View threads/posts
- Can create threads/posts
- React to the threads/posts
- Modify personal things within allowed by admin

For people don't have account

- View threads/posts

#### 2. Excluded

- Advertisement Blocker
- Virus Protector
- Online chat (chat directly to person instead of commenting on threads/posts)

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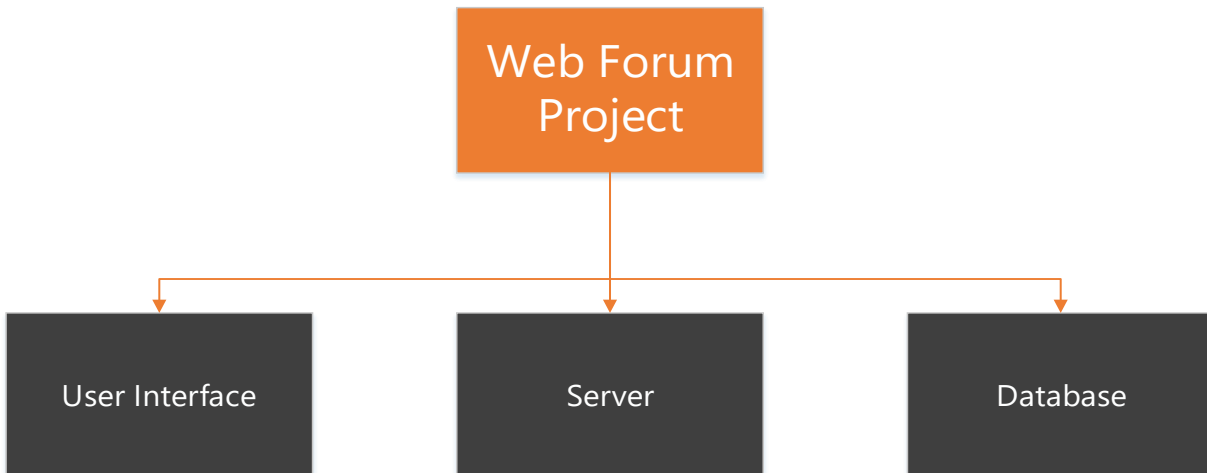
### 3. ORGANIZATION

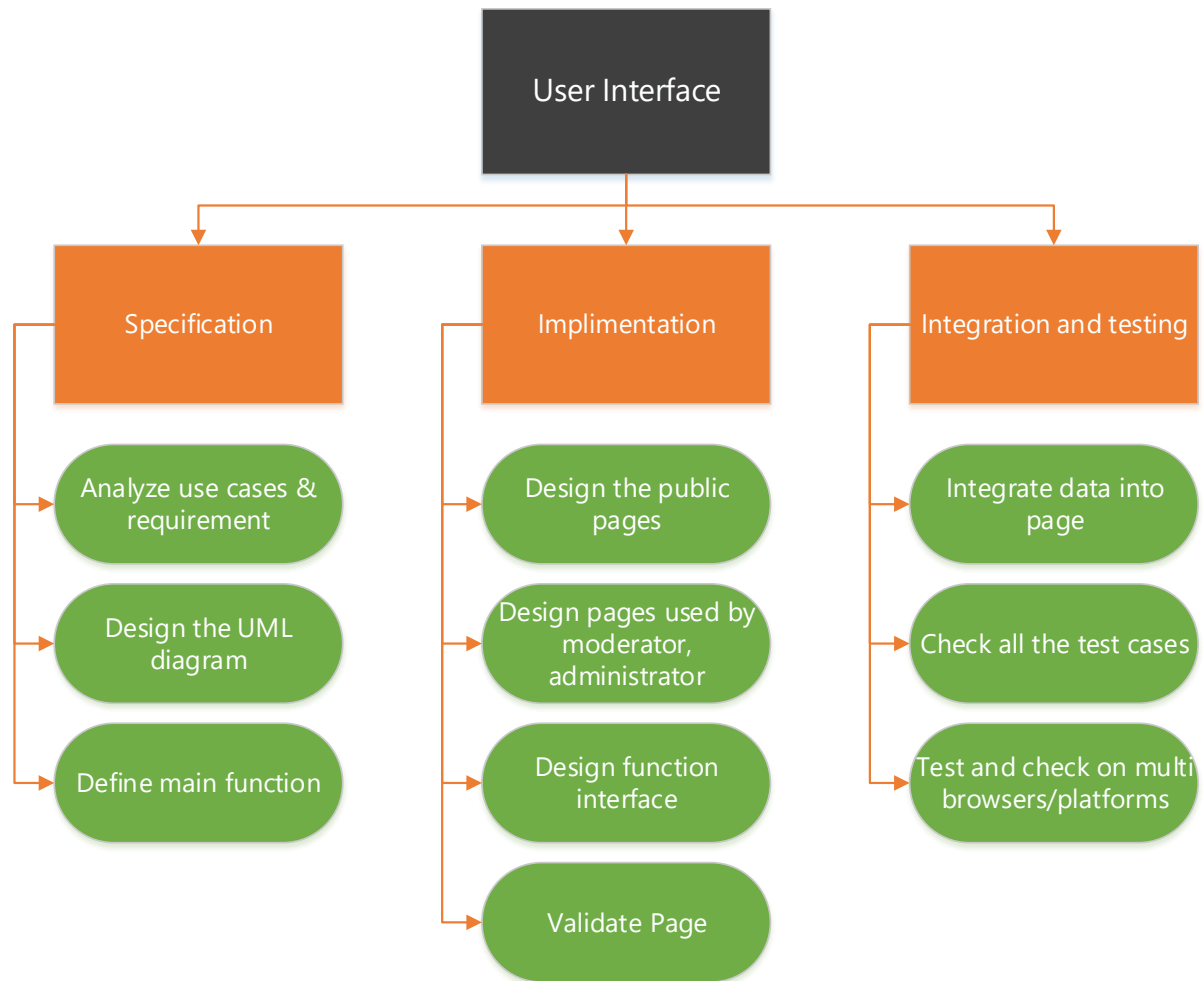
Project team directory for all communications is:

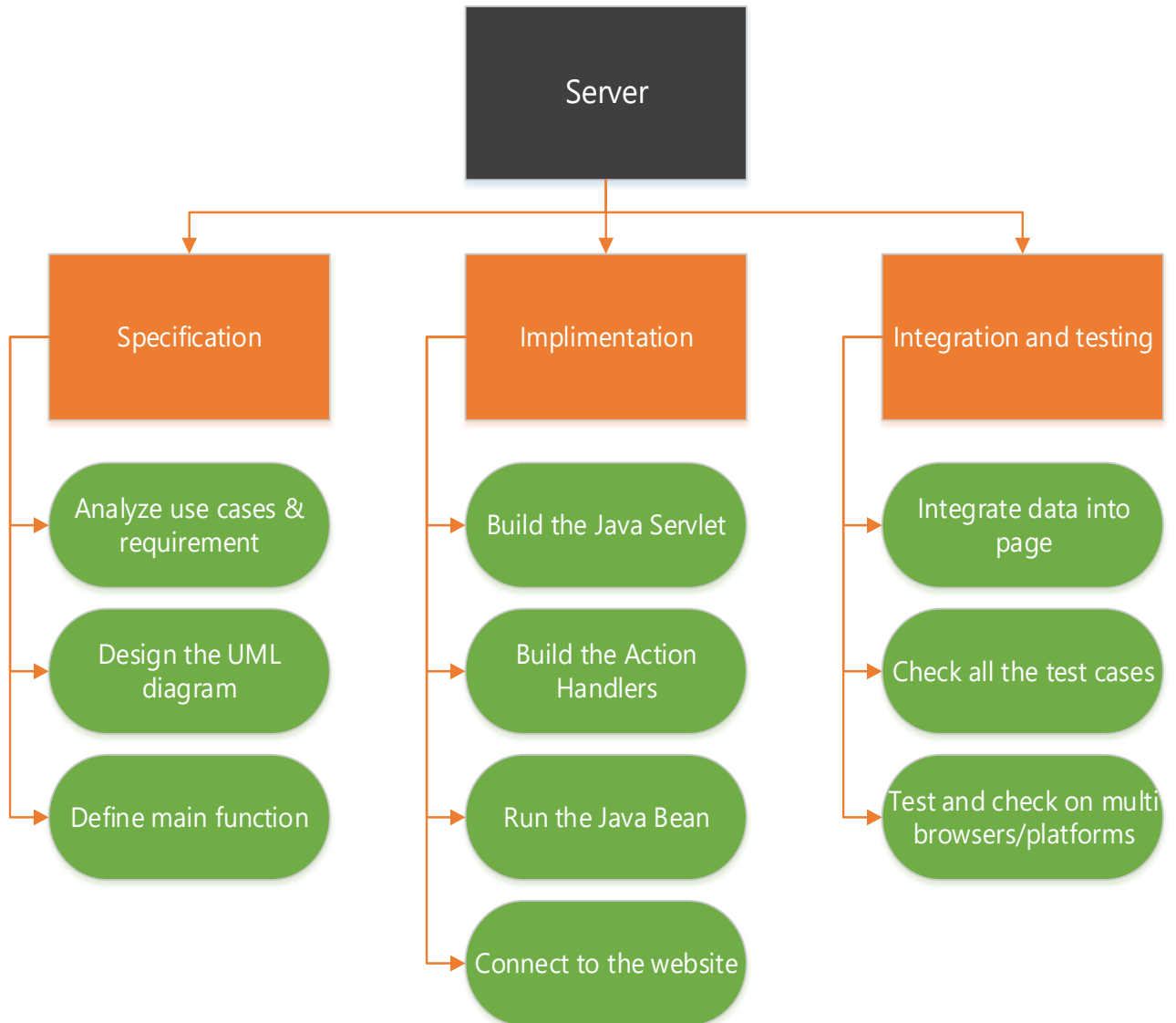
Name	Title	Email
<b>Trần Duy Bảo</b>	Project Manager, Programmer, Technical Writer, Database Manager	
<b>Phan Minh Hưng</b>	Programmer, Quality Specialist, Technical Writer	
<b>Trần Trọng Tiến</b>	Programmer, Designer, Testing Specialist, Technical Writer	

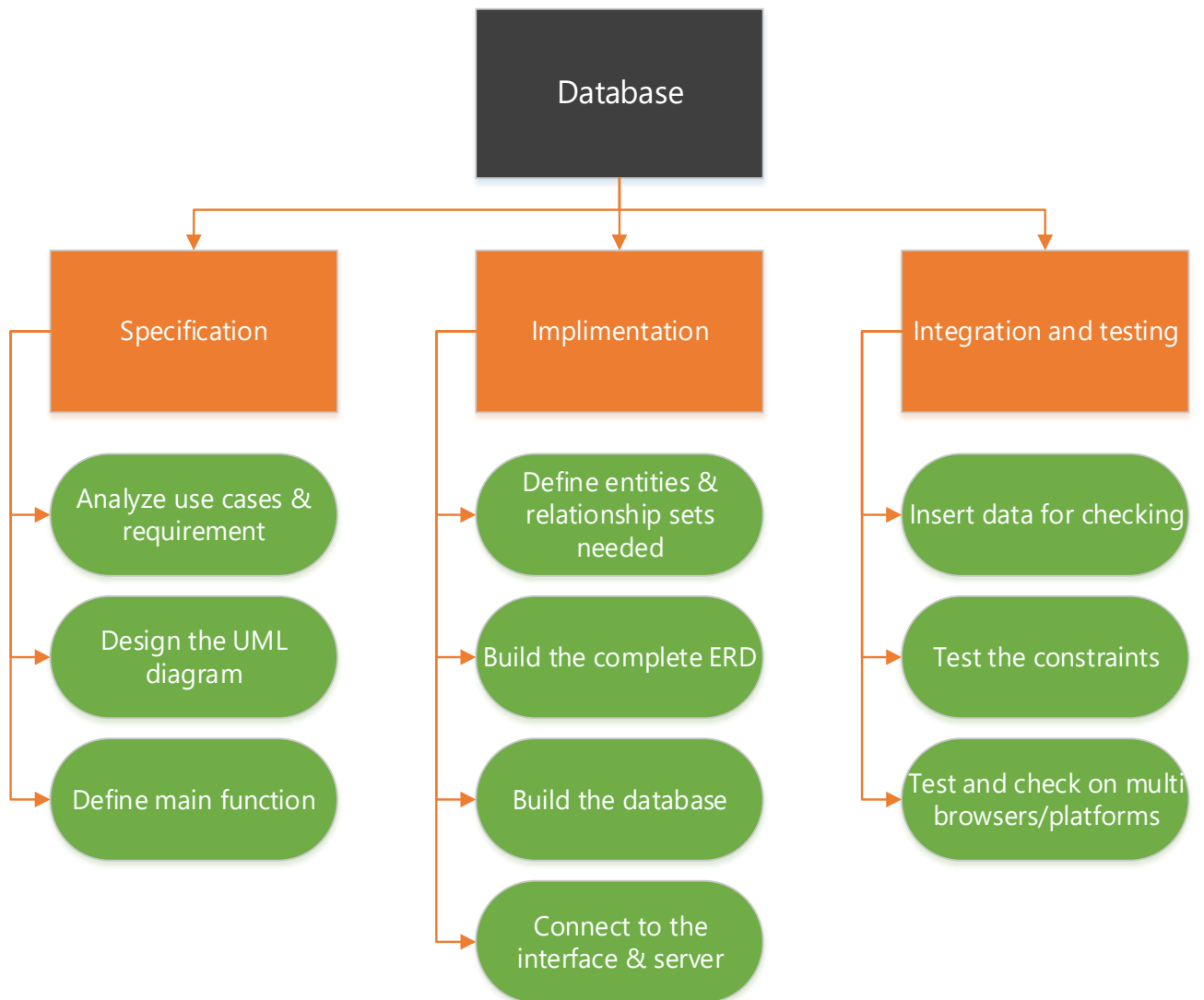
### 4. SCHEDULE & BUDGET

#### 4.1 Work Breakdown Structure











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## 4.2 Schedule & Milestone

### A PRODUCT BACKLOG

Backlog Items	Estimate ( days )	Priority
As an user, I want to read/post the threads/messages so that I can get the information I need	5	1
As a moderator , I want to modify all threads/messages, manage the users so that I can maintain the forum and support administrator	6	2
As an user, I want to registry for the first use and login for the next time so that I can get benifits as a member	4	3
As an administrator, I want to manage the moderator and user so that the forum work well ,no spam and risky information	4	4
As an user, I want to comment/rate/report and have reaction with the threads/posts so that I can state my opinion	4	5
As an user, I want to have a visual category in the forum so that it is easy to use	5	6

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#### 4.3 Budget

- Hardware workstation

Name	Quantity	Purpose	Price
Intel Xeon E5-2620 2.1Ghz	2	CPU	\$810.76
Asus Z10PE-D16/4L	1	Mainboard	\$446.06
Corsair Dominator Platinum 64GB	1	RAM	\$749.99
Intel Optane Memory 32GB	1	SSD	\$89.96
Seagate Ironwolf 10TB	1	HDD	\$353.60
Cooler Master COSMOS C700P	1	Case	\$299.99
Seasonic SSR-1200GD	1	PSU	\$199.90
MSI GTX 1080 Ti Lightning Z	2	VGA	\$3998
Alienware AW2518H	1	LCD	\$621.16
Water Cooling Kit	1	Cooling system	\$283.91
Razer Mamba Wireless	1	Mouse	\$75.66
Corsair K95 RGB	1	Keyboard	\$174.99
Total			\$8103.98

- Software

Name	Quantity	Purpose	Price
MS Windows 10 Pro 64 bit	1	Operating System	\$59.99
Full Adobe Apps	1	Designer Apps	\$66
Domain & Hosting	1	Server	\$40
MS Office Professional 2016	1	Office	\$195
vBulletin 5	1	Forum management	\$249
<b>Total</b>			<b>\$609.99</b>

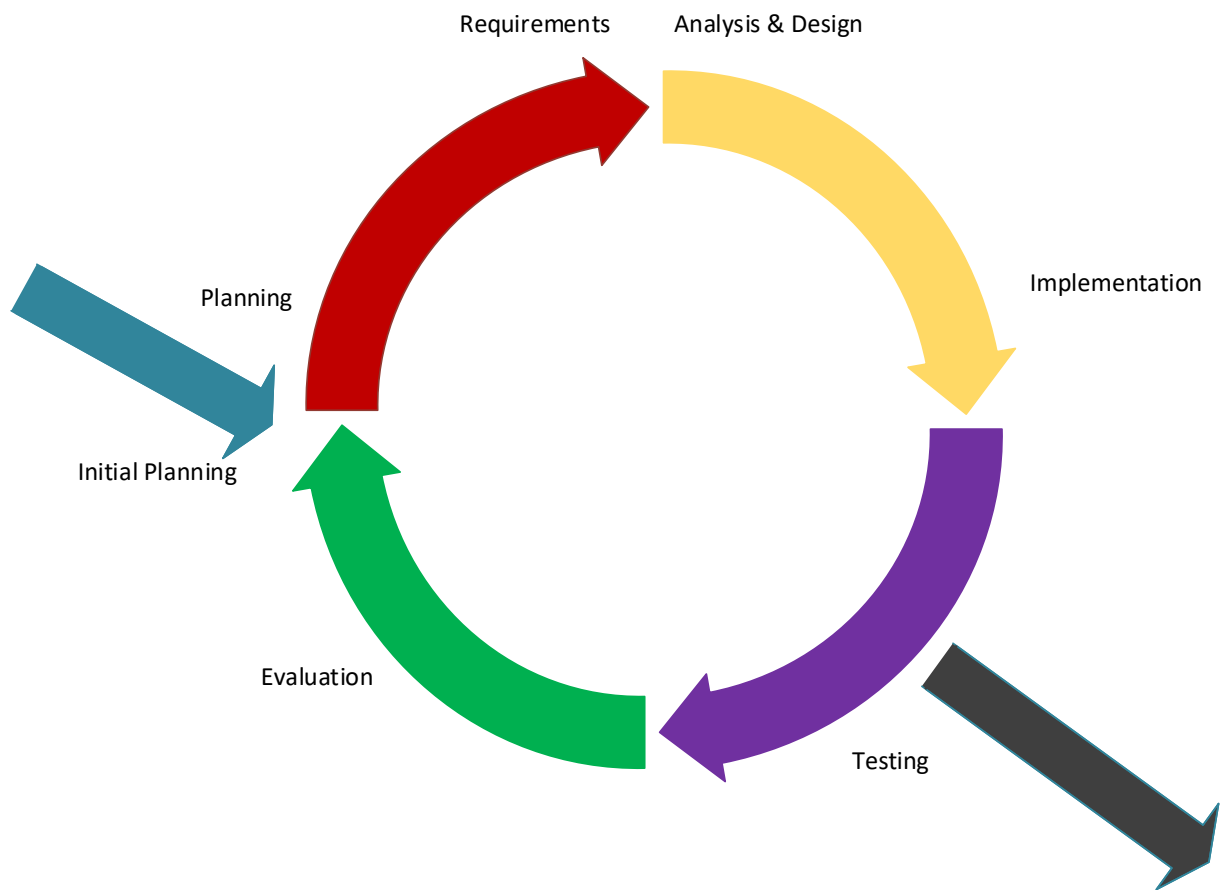
- Human

Name	Salary
Trần Duy Bảo	\$3000
Phan Minh Hưng	\$2000
Trần Trọng Tiến	\$3000
<b>Total</b>	<b>\$8000</b>

#### 4.4 Development Process

We apply Incremental model , which is the fundamental part of agile approach due to some benefits :

- Reduce a big amount of cost of accommodating , analysis and document.
- Every part is developed, debug incrementally.
- Faster delivery and deployment the product to customer, even if not all of the part are finished.
- Easily to get feedback from the customer .
- More convenient to maintain

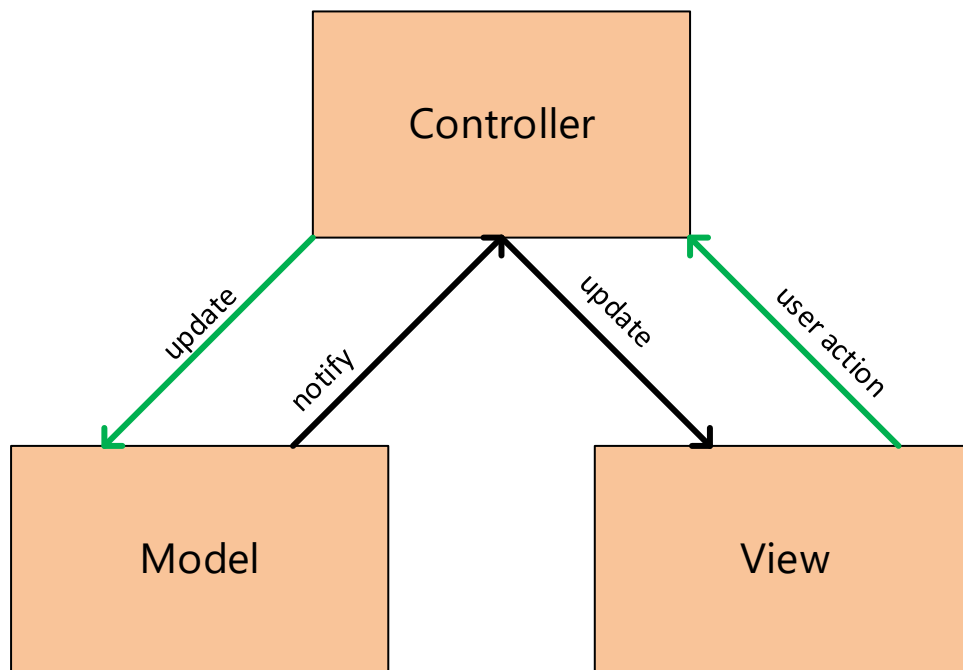


Incremental Development model

#### 4.5 Development Enviroment

Software /Tool /Framework/ Language	Description
HTML5	Outline of the website
CSS+Bootstrap+JQuery	Design the GUI
JavaScript	Make framework
JSP	Perform transaction
JavaBean	Use Object
Servlet	Create Dynamic Webpage
MySQL + Navicat	Create/Manage the database
Netbean	To run/debug the project

Visio	Design the diagram/graph
GlassFish	Use as a virtual server for testing
MacOS/Window 10/Ubuntu	Test Platform



The model is the database that contains user account information, user submissions, problem information... The view is the Graphic User Interface. The controller's primary function is to control database access, specifically it controlling the data flow into the model object and updates the view whenever the data changes. The controller will also contain algorithms.

#### 4.6 Measurement Program

<https://www.websitepulse.com/tools/server-test> - Server status test

<https://tools.pingdom.com/> - Website ping test

<http://www.alexa.com/> - Check Website's ranking

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## 5. RISKS MANAGEMENT5

Volume of problem :



Easy to solve



Serious problem, take some days to solve



Problem damage the project a lots, take long time to solve

### 5.1 PROJECT RISKS

RISK ITEM	RISK REDUCTION TECHNIQUE
Personal shortfalls	Staffing with top talent; job matching; team building; training; prescheduling key people
Team lack of cooperation or weak participation	Make an encouraged enviroment
Change member suddenly due to reasons	Prepare document to train new member if this risk occurs
Unrealistic schedules and budgets	Multisource estimates; design to cost; software reuse
Real-time performance falls	Simulation, benchmarking, modeling, prototyping, instrucmentation; tuning

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## 5.2 PRODUCT RISKS

RISK ITEM	RISK REDUCTION TECHNIQUE
Get bug	Check one by one
Wrong user interface	Operational scenarios, prototyping, task analysis, user characterization
Continuing changes in requirements	Information hiding, incremental development
Virus/Trojan/Hacker attacking	Rebuild the firewall, High quality Anti-virus software, back up data usually
Database/Function fall down	Service stopping for fix, check one by one and all the test cases

## 5.3 BUSINESS RISKS

RISK ITEM	RISK REDUCTION TECHNIQUE
Profit isn't enough to the expectation	Survey and analyze the profits again, keep work on the project
Overpriced product	Remake the budget plan for the other suitable way

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## 6. DELIVERY PLAN

### SPRINT BACKLOG

Sprint Backlog 1 Read/Post/Edit posts,threads								
Case	Member	Mon	Tue	Web	Thu	Fri	Sat	Sun
Define use case, requirements	All	4h						
Design the functions	All	3h						
Draw ERD	Tien		1h					
Make test cases	All		2h					
Insert to Datatbase	Hung		2h	1h				
Design the pages	Bao		1h	3h	3h			
Validate	All					2h		
Test	All						2h	



Sprint Backlog 2 Modify threads, messages								
Case	Member	Mon	Tue	Web	Thu	Fri	Sat	Sun
Define use case, requirements	All	4h						
Design the functions	All	3h						
Draw ERD	Tien		1h					
Make test cases	All		2h					
Insert to Datatbase	Hung		2h	1h				
Design the pages	Bao		1h	3h	3h			
Validate	All					2h		
Test	All						2h	

Sprint Backlog 3 Registry, Log in Log out								
Case	Member	Mon	Tue	Web	Thu	Fri	Sat	Sun
Define use case, requirements	All	4h						
Design the functions	All	3h						
Draw ERD	Tien		1h					
Make test cases	All		1h					
Insert to Datatbase	Hung		3h	3h				
Design the pages	Bao		1h	1h	3h			
Validate	All					2h		
Test	All						2h	

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<b>Sprint Backlog 4</b> <b>Administrator</b> <b>System</b>								
Case	Member	Mon	Tue	Web	Thu	Fri	Sat	Sun
Define use case, requirements	All	4h						
Design the functions	All	2h						
Draw ERD	Tien		1h					
Make test cases	All		3h					
Insert to Datatbase	Hung		1h	1h				
Design the pages	Bao		1h	2h	4h			
Validate	All					3h		
Test	All						2h	

Sprint Backlog 5 Comment,rate Report								
Case	Member	Mon	Tue	Web	Thu	Fri	Sat	Sun
Define use case, requirements	All	4h						
Design the functions	All	3h						
Draw ERD	Tien		1h					
Make test cases	All		2h					
Insert to Datatbase	Hung		2h	1h				
Design the pages	Bao		1h	3h	3h			
Validate	All					2h		
Test	All						2h	

Sprint Backlog 6 Visual Category								
Case	Member	Mon	Tue	Web	Thu	Fri	Sat	Sun
Define use case, requirements	All	4h						
Design the functions	All	3h						
Draw ERD	Tien		2h					
Make test cases	All		1h					
Insert to Datatbase	Hung		3h	1h				
Design the pages	Bao		2h	3h	3h			
Validate	All					2h		
Test	All						2h	

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## 7. ABBREVIATIONS AND DEFINITIONS

Word	Meaning
<b>ERD (Entity-Relationship Diagram)</b>	Graphical representation of an information system that shows the relationship within that system.
<b>MySQL</b>	Open source database
<b>PHP</b>	Open source general-purpose scripting language for web development
<b>Database</b>	A collection of information which is organized for easily accessing, managing and updating
<b>Bug</b>	A coding error in a computer program

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## 8. REFERENCES

<i>Content</i>	<i>Address</i>
Forum design	<a href="http://www.vn-zoom.com/">http://www.vn-zoom.com/</a>
Hosting service	<a href="https://viettelidc.com.vn/">https://viettelidc.com.vn/</a>
Domain service	<a href="https://www.pavietnam.vn/">https://www.pavietnam.vn/</a>
Web coding instruction	<a href="https://www.w3schools.com/">https://www.w3schools.com/</a>
Database service	<a href="https://www.mysql.com/">https://www.mysql.com/</a>

The end