

INSTITUTE OF TECHNOLOGY OF CAMBODIA

Graduate School of ITC



Department of Applied Mathematics and Statistics

Assignment Online Freelancing WebApp

Instructed by:

Lecturer: M. Chan Sophal

Course: IT Project Management

Prepared by:

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ID: M080102

Major: Master of Data Science (M-DAS)

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I. <u>Introduction</u>

In this part, we will divide the project initiation into 2 part. First part is the project charter, which contains the overview of the project including key people and responsibility in the project. Another part is to identify project stakeholder who can influence the project success.

1. Project Charter

The project charter is shown in the table below:

Project Charter

Project Information

Project Name	Online Freelancing App	ID Number	P1-001		
Project Description	Create an online freelancing app on web-app, mobile (Andriod and IOS)				
Project Sponsor	Mr. Chan Sophal				
Program Manager	Mr. Leng Seng Hak				
Project Manager	Mr. Leng Seng Hak				
Organization(s)	Institute of Technology of Cambodia (ITC)				

Target Start Date	15-Dec-22	Target End Date:	15-Dec-23
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Business Need / Project Goal

- To create a webapp as a freelancing platform which can run on laptop, android and IOS.
- To make profit from the webapp by charge on the host account or from the tasks.

Project Scope In Scope Out of Scope • Database management • Develop an application for freelancing on laptop, mobile Hosting Design UX/UI Maintenance **Constraints** Features in the application, Application quality **Key Risks** Limited human resources, Budget is not extensible Assumptions Can reached out to test with the client during developing **Project Budget** 90 000.00 USD

Project Team		Key Project Milestones	
Name	Role	1	Kick off meeting
Mr. Leng Seng Hak	Project Manager	2	Project Start date
Mr. Chean Sokda	Technical Manager	3	Deliver demo
Mr. Try Chenda	Business Analyser	4	Important meeting
Mr. Kong Monyrith	Developper	5	Client approval
Mr. Khan Chandy	Developper	6	Implementing and deploy
Mr. Sok Thanith	Tester	7	Project hand over
Mr. Eng Chamreoun	Implementer	8	Project end date

Contract:

- Calling for progress meeting every Monday and Friday at ITC's F104 from 8:00AM
- Meeting with Project Sponsor every 2 weeks on Friday 3:00PM
- The major communication channel is Telegram Group

- Good teamwork
- Update project progress every week and send the progress to the sponsor and client follow up via email

2. Identify Project Stakeholder

In this part, we are going to identify individual and organization which can directly or indirectly effect the overall success of the project. In this part, we also let the project stakeholder register sign and prepare the stakeholder management strategy and the contact of each project stakeholder is also shown in the table below.

Table 1 Stakeholder Register

Name	Role (Position)	Internal or External	Contact
Mr. Thy Sokdy	CEO	Internal	078-235-879 <u>thysokdy@yahoo.com</u>
Mr. Ou Sovanny	Vice President	Internal	077-127-965 sovannyou@gmail.com
Mr. Chan Sophal	Program Sponsor	Internal	099-2293840 Sophalcamchan38@gmail.com
Mr. Leng Seng Hak	Project Manager	Internal	012-874-985 lengsenghak@gmail.com
Mr. Chean Sokda	Technical Manager	Internal	010-987-963 sokdachean09@gmail.com
Mr. Try Chenda	Business analyzer	Internal	096-875-9651 Chendachenda65@gmail.com
Mr. Kong Monyrith	Developer	Internal	097-985-7951 monyrith12@gmail.com
Mr. Khan Chandy	Developer	Internal	078-965-762 <u>khanchandy@gmail.com</u>
Mr. Sok Thanith	Tester	Internal	012-138-456 thanithsok94@gmail.com
Mr. Eng Chamreoun	Implementer	Internal	077-851-723 chamreouneng11@gmail.com
Mr. Prak Mengly	PR Director	External	012-777-144 prak mengly@outlook.com
Mr. Chai Meng	Assistant PR Director	External	016-777-311 chai_meng@outlook.com

Table 2 Stakeholder Management Strategy

Name	Level of Interest	Level of Influence	Potential Management Strategy
Mr. Thy Sokdy	High	High	Mr. Sokdy wants the report of overview report monthly including the budget report from last month and plan next month. The key management risk also need to transparent to him
Mr. Ou Sovanny	High	High	Mr. Sovanny prefer to join weekly meeting on Monday only and prefer the weekly report to track the team performance
Mr. Prak Mengly	Low	High	In charge of approving the payment in the project, less technical and prefer more about the mile stone of the project.
Mr. Chai Meng	High	High	Mr. Meng is in charge of the project, he can consult the feature and can confirm and approve the prototype of the products.

Table 3 Stake holder sign off

Name Role		Internal Contact		Signatura
Name	(Position)	External	Contact	Signature
		External	078-235-879	
Mr. Thy Sokdy	CEO	Internal	thysokdy@yahoo.com	
Mr. On Carrage	Vice	Internal	077-127-965	
Mr. Ou Sovanny	President	internai	sovannyou@gmail.com	
Mr. Chan Sanhal	Program	Internal	099-2293840	
Mr. Chan Sophal	Sponsor	mternai	Sophalcamchan38@gmail.com	
Mr. Long Song Holz	Project	Internal	012-874-985	
Mr. Leng Seng Hak	Manager	miemai	lengsenghak@gmail.com	
Mr. Chean Sokda	Technical	Internal	010-987-963	
IVII. Cilcaii Sokua	Manager	memai	sokdachean09@gmail.com	
Mr. Try Chenda	Business	Internal	096-875-9651	
IVII. 11 y Chehaa	analyzer	Internal	Chendachenda65@gmail.com	
Mr. Kong Monyrith	Developer	Internal	097-985-7951	
With Kong Wionythin	Developer	memai	monyrith12@gmail.com	
Mr. Khan Chandy	Developer	Internal	078-965-762	
Wii. Khan Chanay	Beveloper	Internal	khanchandy@gmail.com	
Mr. Sok Thanith	Tester	Internal	012-138-456	
WII. SOR THURIE	1 05101		thanithsok94@gmail.com	
Mr. Eng Chamreoun	Implementer	Internal	077-851-723	
Time Eng Chamicoun	implementer	mema	chamreouneng11@gmail.com	
Mr. Prak Mengly	PR Director	External	012-777-144	
Time Time Ividingly	TR Director External		<pre>prak_mengly@outlook.com</pre>	

Mr. Chai Mana	Assistant PR	Extom of	016-777-311	
Mr. Chai Meng	Director	External	chai_meng@outlook.com	

II. Project Planning

In order to achieve the objectives of the project, we need to clearly define the project scope in a way that can be easily execute and manage.

1. Project Scope Management Plan

The documentation process of the project is crucial for determine the project scope by define project objectives and plan the work in a manageable manner. Hence, the activities can easily coordinate and track so that the project completion is secured. The output of this section is the project plan.

Online Freelancing App

Introduction

The online freelancing app is the project to create an online platform that can run on the android, IOS and even the webApp. The application allows the company outsource their task without recruiting full time employee and allows the individual find income in their part time.

Objectives

- To create a webapp as a freelancing platform which can run on laptop, android and IOS.
- To make profit from the webapp by charge on the host account or from the tasks.

Scopes

- Design the UI/UX of the application on both 3 platforms (Android, IOS and Webapp)
- The application include the features that define by the clients
- Integration of the database and the application (Database is the client responsibility)
- Hosting during the development period for trial and not permanently host

Key Stakeholders

Client	Mr. Prak Mengly, Mr. Chai Meng
Sponsor	Mr. Chan Sophal
Project manager	Mr. Leng Seng Hak

Resource and Tools

- PC and Laptop
- Printers
- Flutter / Swift and Kotlin

Milestones List

In order to complete the project, we have to track the result, show some prototype and have some important meeting with stakeholders. We have to predefine the schedule for those events in advance. The important milestone is shown as the table below.

Milestone	Description	Date
Kick off meeting	Start the overall description and expected scope of work of the project between all parties	7-Dec-2022
Requirement Gathering	Client state which features are needed and which feature is prior and we sign off the features statement.	20-Dec-2022
UI Prototype first phase	Issue the first prototype of the UI design and let the client improve and confirm the design	2-Feb-2023
Complete UI Design	Change the UI according to the client recommendation and deploy the design again to the client for confirmation	3-Mar-2023
Feature prototype	Demo the features client needed from the requirement gathering phase and show it to the client for recommendation and make some necessary change	5-May-2023
Complete coding (Android)	Deploy the application on the android based platform	1-Jun-2023
Complete coding (IOS)	Modified the code and change it adapt to the IOS platform	15-Jul-2023
Complete coding (Webapp)	Configure the code in flutter and make it run on the webapp	20-Aug-2023

Progress meeting	Have a meeting with project stakeholders to show what has been confirmed and approved	11-Sep-2023
Debugged and Testing	Debugged and test the application and deployment	25-Oct-2023
Client Approval	Signed off the approval of the project deliver	27-Nov-2023
Handover project (Closing)	Handover the whole project, products and deliver the important document and evaluate the performance of the team during project	10-Dec-2023

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Mr. Chan Sophal
Mr. Leng Seng Hak
Project Sponsor
Project Manager

2. Project Scope Statement

Project Name	Online Freelancing App	Date	7-Dec-22
Project Number	P1-001	Project Manager	Leng Seng Hak

Business Need / Project Objectives

Make a freelancing online application for organization and individual able to get work via online

Reduce the number of permanent staff and make people be able to work via online

Receive commission when hosting work is accepted

Project Description and How it Meets the Business Need

To create a webapp as a freelancing platform which can run on laptop, android and ios

To make profit from the webapp by charge on the host account or from the tasks

Project Benefits

- 1. Make profit by doing project to customer
- 2. Be able to earn profit by maintenance after deliver the project
- 3. Maintain organization reputation by deliver outstanding project

Project Requirements

- 1. Create an IOS, Android and Web-App
- 2. The application must include the feature guide by the customer
- 3. The source code file is clean and maintainable

Project Deliverables

- 1. Source code of the application
- 2. Project guideline
- 3. 1 Week training over the project deliverable

Project Does Not Include

- 1. Application hosting
- 2. Database management
- 3. Application Maintenance

Success / Acceptance Criteria

- 1. The UI is the same as the customer approval
- 2. The Features are completed as the customer requirements
- 3. The testing is pass certified by third party company

Estimated Cost of Pr			
Expense Type	Description	Estimated Cost	
Labor			
Internal	The salary of the project team	62, 000 USD	
External	UX Testing	5, 000 USD	
Software	Testing and coding software	3, 000 USD	
Hardware	Printer, Computer	10, 000 USD	
Other	2, 000 USD		
Total Estimated Cost of Project 82, 000 USD			

Project Constraints

- 1. Customer features requirement
- 2. Time bounded
- 3. Project cost

Project Assumptions					
The customer can be reached during the development					
The project team doesn't change during the project period					
3. There is no scope extension during the project					
Decision					
Approved	Rejected				
Approved with modifications	Deferred				
Required Modifications					
Additional Comments					
Mr Chan Sophal / Project Sponsor	Mr. Leng Seng Hak / Project Manager				
Title					
Signature					

WORK BREAKDOWN STRUCTURE (WBS)

Project Name	Online Freelancing Webapp	Date	20-Dec-22
Project Number	P1-001	Document Number	D1-01a
Project Manager	Leng Seng Hak	Project Owner/Client	Institute of Technology of Cambodia

		WBS C	ode /ID	Component Name	Brief Description
1.				Online Freelancing App	The main objectives of the project
	1.1			UI Design	Design the UI on the 3 platform according to the OS styles
		1.1.1.		Overall Design	Refer to the color, location of the button and so on
			1.1.1.1	Main Page UI Design	What should appear on the main page and design the button
			1.1.1.2.	Color modification	Modify the color of the application so that user can use easily
			1.1.1.3.	Each page UI design	Design UI of each pages
			1.1.1.4.	Customer approval and	Check with customer over the design of the UI and let customer
				revision	recommend the change needed
			1.1.1.5.	UI design revision	Revise the design according to the customer needed
	1.2.			Features Coding	Design the feature
		1.2.1.		Coding the feature	Code the feature according to the requirement
		1.2.2.		Improving the feature	Improving feature performance and style
		1.2.3.		Customer recommendation	Show the prototype to the customer and ask for recommendation
		1.2.4.		Feature revision	Revise the feature according to the customer needs
	1.3.			Test and Debugged	Test and debugged the application
		1.3.1.		Overall performance test	Testing on the overall performance
			1.3.1.1.	Testing on Andriod	Check on the performance on Andriod
			1.3.1.2.	Testing on IOS	Check on the performance on IOS
			1.3.1.3.	Testing on Webapp	Check on the performance on Webappp
	1.4			Implementation	Implement and deploy the application
		1.4.1		Implement on Andriod	Implement the application on android play store
			1.4.1.1	Check performance and usability	Check the performance on whether it is smooth and usable
		1.4.2		Implement on IOS	Implement the application on App store
			1.4.2.1	Check performance and usability	Check the performance on the actual application and usability of each function
		1.4.3		Implement on Webapp	Implement the application on Webapp
			1.4.3.1	Check performance and usability	Check the performance on the actual application and usability of each function

WBS DICTIONARY

Project Name	Online Freelancing WebApp	Date	20-Dec-22
Project Number	P1-001	Document Number	D1-02a
Project Manager	Leng Seng Hak	Project Owner/Client	Institute of Technology of Cambodia

WBS Code	Predecessor	Resource Requirement	Assumptions and Constraints	Cost Estimates
1.3.1.1	1.3.1	PC, Printer, Andriod Phone	Tester have knowledge in testing the application	4, 000 USD
Accounting Code	Successor	Resource Assignment	Holidays	Quality Requirements
P1-001-1311a	1.3.1.2	1 Tester	No holiday during testing period	Smoothly run
Component Name	Dependencies	Date Assigned	Estimated Level of Effort	Acceptance Criteria
Freelancing	Speed of the internet and phone	1-Sep-23	High	Smoothly and no bugs found
Description of Work	References (e.g. technical or contract)	Due Date	Deliverables	Deliver To
Test the performance of app including feature, speed, etc.	D1-012a	15-Sep-23	Complete all requirement according to checklist	Technical Manager

DELIVERABLES ACCEPTANCE

Name / Role	Responsibility	
Mr. Chan Sophal / Project Sponsor	Verifies the project deliverables	
Mr. Leng Seng Hak / Project Manager	Presents the project deliverables	
Mr. Chean Sokda / Technical Manager	Reviews the project deliverables	
Mr. Chai Meng / Client	Accepts or rejects the project deliverables	

ACCEPTED DELIVERABLES

In order to determine whether the work is deliverable, we have to compare the work output with the customer requirement. The accepted deliverable will have a checklist on whether the product is in accord with the requirement. The checklist need to sign by the technical manager and the project manager to approve. The project deliverable can be shown to the client as prototype

REJECTED DELIVERABLES

In case the customer decline the deliverable, we have to check whether the rejection is from the difference of the product from the specification or the customer dissatisfaction itself. In case, the deliverable is different from the requirement the project manager will be responsible on change. In case, the customer needs anything else that is different from the project scope. The customer have to discuss or submit a proposal to the project sponsor and project manager. The project manager have the right to request additional time and budget for the additional scope or reject the extend scope.

SCOPE CONTROL

Controlling project scope is the process of monitoring the status of the project scope and managing changes to thescope baseline.

MONITORING

Project manager will be in charge to tracking the activities of the whole project performance in order to secure the project is deliverable under the time constraint. The technical manager has the right to monitor the work of the team as well in the technical aspect.

Name	Scope Monitoring Activities
Mr. Chean Sokda	Monitoring from the project manager
Mr. Leng Seng Hak	Monitoring whole project progress
Mr. Chean Sokda	The technical project deliverables (does it according to the requirement)

WORK PERFORMANCE DATA

Project manager will manage the work performance data. The important performance include:

- Project backlog
- Project accomplished work
- Change request log

III. Project Executing, Monitoring and Control

During executing project, it is essential to track the project and keep follow up closely so that everything is under control. Therefore, we need to track and control the task during execution to ensure everything go well as planned.

1. Project Scope

In the execution phase, it is very important that we have cover every activities in the planning phase. If there any activities we missed out from the planning phase, we shall make sure the activities can fit in the schedule and cost. The change of scope must be aware as soon as possible so that we can have time to make changes within the time limit.

2. Project schedule

The project schedule and activities must be track closely against the baseline. The activities we shall pay attention to the most are the activities on the critical path as it can effect the whole project deliverable. The tracking of the project activities and update in the project schedule or adjust the plan to make the project can catch up in case there is an unexpected event occurs. The adjustment of human resource to each activities can be handful when dealing with project schedule adjustment.

3. Project Quality

The project quality is normally can track in the project-testing phase. Quality is an important part of project deliverable. Therefore, the technical manager and project manager should always follows up the project work quality as many times as possible during the project-building period. This can ensure the product output is always in high quality.

4. Communication

The communication in the project execution is very important as it can make the organization structure and project fall apart. The communication of the project always keep in check to ensure no conflict occur during the project team and the customer. The important notice shall be communicate via email so that we can file for further used. The channel of communication and openness among the project team shall make it transparent. Honesty could make the team more productive.

5. Human Resource

The human resource is an important factor in securing the project success; we have to ensure that the project team are driven enough in making the project a success. We have to keep follow up with the people so that they feel value and not leave during the execution phase.

6. Documentation

Documenting the activities, the spending, the checklist, minutes of meeting, invoice, receipts etc. Anything that can be documented shall be filing and keep a copy as a reference for further used. The scope statement, spending and progress report should be taken seriously, as it can used for further used in case anything happens.

7. Project Cost

The cost we spend of the project must be followed up closely as many project are suffered from the cost overrun. Make sure the project budget only spend on stuff that align with the project goal and not wasting money on the unnecessary things. The cash flow must be track closely. If there are any spending that was missed in the project planning phase must be consider.

IV. Risk Management

Unexpected events can always be occurred during the executing phase of the project. Therefore, this section we will address some of the probable risk that can occur during the project along with the contingency plan or plan B in case it occurs. On the top of the contingency plan, we also address some activities we can follow so that we can minimize the probability of the occurrence of the risk. The risk log of the project can be given as the figure below:

No.	Risk	Description	Severity	Probabilty of Occurrence	Contingency and Mitigation Actions (incl. "Plan B")
1	Project output is not what the customer wants	Risk of misunderstanding of the concept that explain from the customer and build the product that is completely different what customer wants	High	Medium	 Filing the document of what customers want with the approval signature Show the demo or prototye of the product to the customer and ask for feedback Be aware of building the wrong product as soon as possible
2	Project cost overrun	Risk of spending more than the project provide and spending on the unneccessary things	Medium	Medium	 Always filing the spending of the project and always track the spending Have a back up budget to cover when risk occurs Add a buffer when estimate the project spending
3	Project Team leave during the project period	Team members resign during building the project and it take times to fill the roles	Medium	High	1) Have an employee restraint strategy 2) If possible, make a contract with the project team before starting the project 3) Keep the project team motivated and driven
4	Hardware goes down during building project	Hardware does not working or broken during doing the project	Medium	Low	1) Have a backup hardware in the warehouse 2) Schedule the maintenance of hardware and take it in consideration
5	Project run behind schedule	The project can be complicate or there is unexpected occur or change during project can lead to running behind schedule	Medium	High	1) Have a budget to let the employee work overtime 2) Continuosly follow up the project progress and keep the schedule in check 3) Keep adjusting the schedule when there is change so that it can be easy to track
6	Breakout or natural disaster	There is natural disaster or epidemic occur during the project	Medium	Low	1) Keep the working from home is always an option 2) Have insurance for project team
7	Scope adjustment during the project	customer wants to change scope or add feature to the work which different from the agreement	Medium	High	 Spare a schedule and plan for a change request Develop a change strategy which occur during execution Make the work planning flexible and adaptable to change

V. Project Closing

After completing the project and deliver it to the customer, it is very essential to have closure for the project. The closure of the project is not just a simply party to celebrate the success. It is can be more beneficial for further project. During the project closure, we should consider the following point

1. Documents

After deliver the project, all documents shall be kept in one place. The deliverable of the project to the customer must be file with the approval signature of the customer to receive the final payment of the project. It is not just the final approval, the copy of invoice, minutes of meeting, testing sheet and other related document shall be kept.

2. Rewarding

There is should be a budget for rewarding the project team, the best performer during the project to inspire them and other project team member to always enthusiastically aim for the best performance when building the next project. Monetary can keeps people motivated.

3. Lesson Learned

After completing the project, it should be reflect back into project executing phase. What did went wrong when building the project, how can it be better, what did we missed, how did we solved it, is there a way to prevent it in the future? Those type of question must be asked and document it if possible. It is not only the mistake that we should reflect on. We shall also of what we did good during the project and keep on doing it for the future project. Continuous improvement is the goal.

4. Communication

Although the project is ended, we shall keep in touch with the customer and ask for the feedback after the project deliverable after a months or few weeks, what they feel is good and what should be improve in the project and so on. Ask for the feedback doesn't mean the project team will keep fix the project to the customer needs anymore. We keep the communication open with the customer and always ask for constructive feedback from customer.

VI. Conclusion

After we completing do the project management plan, we can see that the project management is a complex process of managing everything that happens relate to the project. Ranging from cost, working with people, the technical part, non-technical part, etc. Planning in project management is the most crucial part, therefore, having experience in the field can be advantage. However, project management is a long term process, it doesn't just planning but it the continuous process from the initiative to closing. The ability to plan and the ability to be flexible and high adaptability are the essences of a great project manager.