

COVHAT

Tender Documentation
050917042



Introduction

The software development document contains all preparations pertaining to the development of each unit or module, including the software, test cases, test results and any other items that will help to explain the functionality of the software. The document is dynamic and is maintained by the system development team and should be constantly updated as the system's development progresses.

Project Outline

1. **Project title:** A windows chatting application (*COVHAT*).

2. Project Objectives

- **Cost** – Reducing cost of data charges of old systems of communicating.
- **Efficiency** – Getting more output of workers as workers find it easy to communicate and share idea via the application.
- **Productivity** – Getting more output for a unit of input. Reducing the energy cost of workers/students.
- **Process** – Improving business processes. For example, using a chatting application technique to reduce the downtime of a production line.
- **Integrating** – Connecting workers/students and getting them to work together.
- **Sustainability** – Reducing the impact of work/campus environment and improving the quality of life of communities.

3. Project Background

There are many institutions and organization sharing the same WIFI connection. This application is specifically designed for users of such institutions and organizations to connect and communicate directly.

4. Project Description

This project will develop a windows chatting application that can be accessed using personal log in details like *username and password*. Users access the application welcome interface and has two access buttons which are *Log in (Users already with account)* and *Sign up (Registration for users without account)* for security purposes. Users are then introduced to the chatting interface.

The chatting interface requires users Internet Protocol and Port to the network, and Guest Internet Protocol and Port to the network. Connecting can then be made between two computers and users can communicate using the text field and the send button.

Skills Matrix

Capabilities	Bekoe Isaac		Emmanuel Twumasi Sarfoh		Richie	
	Proficiency	Interest	Proficiency	Interest	Proficiency	Interest
Technical writing	2	1	3	0	3	0
Graphic design	3	1	1	1	2	1
Legal research	2	0	3	1	2	0
Data Analytics	2	1	2	0	3	1
Questionnaire design	2	1	2	1	3	0

Proficiency level

0 = No capability

1 = Basic level

2 = Intermediate level

3 = Advanced level

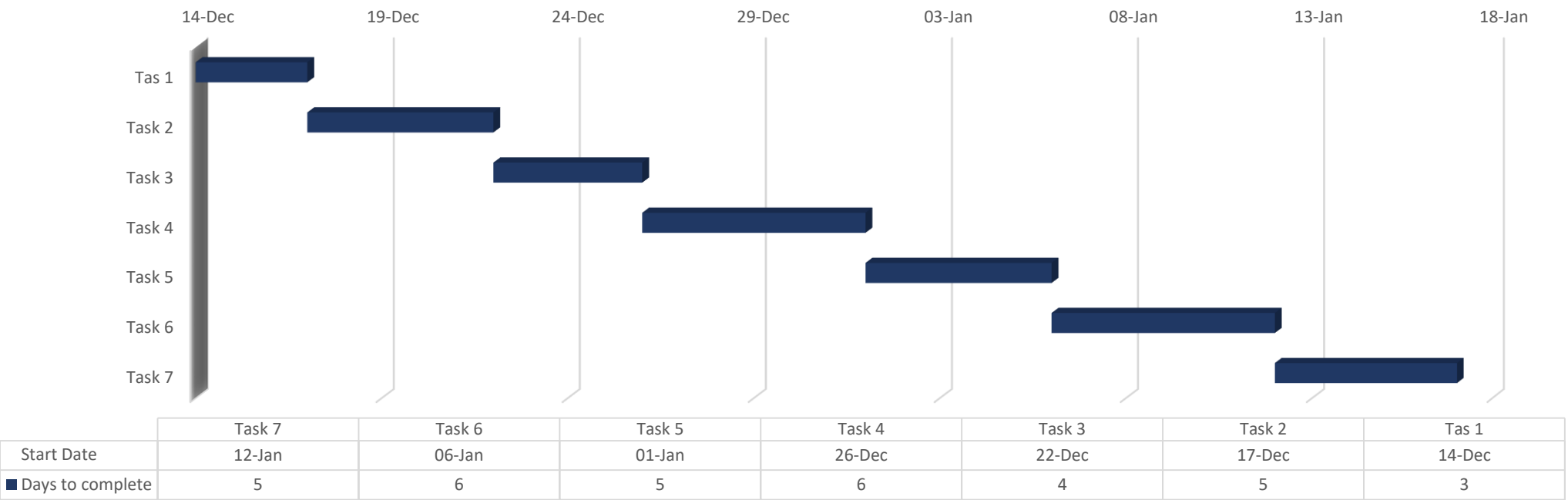
Interest

0 = Has no interest in applying this capability

1 = Is interested in applying this capability

Project Plan

Covhat Project plan



Task	Application logic layer step
Task 1	Step 1
Task 2	Step 2
Task 3	Step 3
Task 4	Step 4
Task 5	Step 5
Task 6	Step 6
Task 7	Step 7

A project costing

				Labour		Materials			Budget		
Task	Description	Start Date	End Date	Hour	¢/Hour	Travel	Network	Space/Office	Estimate	Actual	Balance
Task 1	Login and Signup option of the user.	14-Dec	17-Dec	12	¢ 40	¢ 85	¢ 20	¢ 25	¢ 700	¢ 610	¢ 90
Task 2	A condition for login option	17-Dec	22-Dec	12	¢ 40	¢ 15	¢ 20	¢ 25	¢ 650	¢ 540	¢ 110
Task 3	A condition for signup option	22-Dec	26-Dec	8	¢ 60	¢ 25	¢ 30	¢ 25	¢ 600	¢ 560	¢ 40
Task 4	Generate local IP of the user's computer	26-Dec	01-Jan	7	¢ 55	¢ 35	¢ 20	¢ 25	¢ 600	¢ 465	¢ 135
Task 5	Message call back from the Guest	01-Jan	06-Jan	8	¢ 60	¢ 12	¢ 20	¢ 25	¢ 700	¢ 537	¢ 163
Task 6	connecting the two IP addresses	06-Jan	12-Jan	14	¢ 25	¢ 70	¢ 20	¢ 25	¢ 700	¢ 465	¢ 235
Task 7	Enabling of the send button	12-Jan	17-Jan	20	¢ 20	¢ 60	¢ 70	¢ 25	¢ 750	¢ 555	¢ 145
SUBTOTAL				81	¢ 300	¢ 302	¢ 200	¢ 175	¢ 4700	¢ 3732	¢ 918

A Risk Analysis Matrix

REF/ID	RISK DESCRIPTION	RISK SEVERITY	RISK LIKELIHOOD	USER IMPACT	TRIGGER	MITIGATION/WARNING
Signup password mismatch.	A registering user might incorrectly type a different re-write password.	TOLERABLE	PROBABLE	LOW	Sign up password mismatch.	Prompt user to re-write password.
Incorrect Log in details	A registered user might type wrong log in detail.	TOLERABLE	POSSIBLE	LOW	Wrong Log in detail.	Prompt user to retype log in details.
IP and Port connection	Wrong socket connection	UNDESIRABLE	PROBABLE	MEDIUM	Wrong/No port receiver.	Prompt user an existing connection was forcibly closed by remote host.
Empty message	User sending an empty message	INTOLERABLE	IMPROBABLE	HIGH	Clicking the send button whiles text message text field is empty.	No message is sent.

IMPROBABLE RISK IS UNLIKELY TO OCCUR	LOW	MEDIUM	MEDIUM	HIGH	SEVERITY			
	– 1 –	– 4 –	– 6 –	– 10 –	ACCEPTABLE LITTLE TO NO EFFECT ON EVENT	TOLERABLE EFFECTS ARE FELT, BUT NOT CRITICAL TO OUTCOME	UNDESIRABLE SERIOUS IMPACT TO THE COURSE OF ACTION AND OUTCOME	INTOLERABLE COULD RESULT IN DISASTER
POSSIBLE RISK WILL LIKELY OCCUR	LOW	MEDIUM	HIGH	EXTREME				
	– 2 –	– 5 –	– 8 –	– 11 –				
PROBABLE RISK WILL OCCUR	MEDIUM	HIGH	HIGH	EXTREME				
	– 3 –	– 7 –	– 9 –	– 12 –				

An Ethical assessment



National Research Ethics Service

Application Process Flowchart

