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# **Project Plan Document**

**for**

**“Mobile Application for Bargainer”**

**-a platform to validate used product price.**

**An implementation project for a north American based software company**

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## **1. Executive Summary**

We are a consulting firm who have undertaken a project to develop a mobile application for the business concept from a major north American based client to address the huge drawbacks existing in Used product sale and re-sale market environment. This project will address a major concern in existing Used product market which is highly decentralized, and the price marked on the product are solely based on the seller's preference. There are various platforms available online and offline such as eBay, craigslist, amazon, etc. to list the used products and these platform just acts as an interface between seller and the buyer and provides the seller with option to decide the price. Though there are many websites available to validate the retail price of a **new** products there is no platform available to validate the price and authenticity of the quoted price of a **used** product.

The organization has hired our company to work on their project on developing a mobile application for the business as a first phase of establishing the platform. This mobile application will act as an interface to the user to validate and verify the price of the used product and will help the user to arrive at a conclusion before finalizing on buying a used product online.

## **2. Project Description**

This project is aimed at developing a mobile application for “Bargainer” users (people in market for buying used product) who are trying to figure out the exact price of a used product which they are intending to buy. for e.g., if a person wishes to buy a used “2005 Toyota Prius” car from an online website like eBay then this mobile application (Bargainer) will help him figure out the actual price of the car.

The price prediction service will be offered to the customers in two different methods.

1. **Intelligent suggestions:** The app will suggest the user with a price based on the data available in the database using machine learning techniques and this predictor becomes more and more better when more and more users enter data to the mobile app
2. **On-Demand service:** The app also provides option to the user to hire an expert and get service from the expert for a minimal price.

Thus, providing opportunity for the user to arrive at a conclusive price for the desired product he/she wish to obtain.

**App Description:** The mobile app will have a search bar or categories to select the product from or search for the product. Once the product is selected the next stage would be to determine the product age ( which year the product is initially purchased ) and next stage is to determine the product quality ( all parts working, wear and tear analysis ) and next stage the app will determine the potential price which can be paid for the product and provides details to

discuss with the seller before purchasing the product. And the next stage will be optional that the app will suggest the user to hire a live expert for a cost to determine the value of the product.

### **3. Business Objectives and Success Criteria**

The Business objectives are as follows:

- To develop a mobile app “Bargainer” for our client’s business and meet their business requirements within budget.
- The main objective of the project will be on developing the application as instructed by the client which focusses on providing service in the unique domain to the user which no other similar service is available.
- Gather extensive product/user data in the resale product domain to make the application smarter.
- Should provide platform for client to collaborate with major resellers to gather insights on market.
- The client should generate revenue with equal importance in the app to both on-demand and intelligent service.
- Promote brand value for the client – since the app is unique and can list any variety of products the user should appreciate the service along with recognizing the brand.
- Increase trust value with users by providing apt results for the search in the app.
- Establish a mobile platform for experts to provide service to users for nominal price, while also generating income to the client business.
- Design the application to increase returning users.
- **Budget and Timeline:** based on the initial analysis the project involves team 2 developers and 2 tester and with 2 high level supervising and business analyst like managers and team leader and also potentially could take 4 months to complete the project and initial estimate to develop the application will cost around 350,000 USD

The Main **success criteria** for the project are as follows:

- Deploying the application successfully with both intelligent service and on-demand service to client without any issues
- Finishing the project and delivering it to client within the promised timeline
- Should not exceed the projected budget committed to the client.
- The mobile app developed should be accessible to all user in specified geography locations as requested by client.
- Gather sufficient data from 3<sup>rd</sup> party sources and user input and establish better machine learning outputs for the user queries.
- Should attain 100+ expert service provider registration per day for on-demand service.

- Enable client to establish collaborations with major online and offline resellers like eBay, amazon, etc. and direct links to them in the mobile app.
- Slowly book profits from data and on-demand service percentage

#### 4. Stakeholders

Stakeholders are individuals, groups, or organizations that are actively involved in a project, are affected by its outcome, or can influence its outcome. For the “Bargainer mobile application” project the following stakeholders are identified

<i>Stakeholder</i>	<i>Major Benefits</i>	<i>Attitudes</i>	<i>Win Conditions</i>	<i>Constraints</i>
Product Owners (Client)	Reap profit in longer run	Believe in the initiative and provide support in all forms	Earn profit	Could take longer to establish and start earning profits
Consulting company (Project owners/Contracting company)	Get paid for the contract and secure more future contracts	Work with business owners to understand the basic need.	Deploying application successfully	Keep up with demanding needs of the business owners
Managers / Business Analyst	Improve the product total value for profit	Work towards understanding the end-to-end business requirement to provide better service	Successfully delivering the product to client	Keep adapting based on user requirement and tackle any competitions trying to replicate the service
Developers / designers	Experience on resale market And be a part of new initiative.	To understand the business requirement, cater to the user needs	Successful deployment without any bug in the application	Work on agile environment to deploy the service in various platforms
Users (Resale product buyers)	Get expert opinion before buying a resale product	Understand the new business concept and provide feedback	Get expert service with no to minimal charges	May take little longer to view all listed products. Technology takes

		for the betterment of the service		time to adapt to machine learning
Experts (service providers)	Earn income by providing service	Willing to pay the service provider with a nominal percentage from their income	Earn profits by providing service	May take little time to establish expert credibility

## 5. Project Mission

The mission of ‘Bargainer’ is to be ultimate online solution for buying and selling certified used products. The application is designed to give more control of the buying process and make finding a used product price easier than ever before. Enabling product sellers to gain more from their sale conveniently while making sure that buyers get the best with their money is our focus. To drive integrity by being honest and transparent in every interaction made through this application is our goal. Every used product has a low, no-haggle price, so you can focus on what matters. Bargainer experts also compile buying tips to help shoppers ask the right questions at a seller’s lot and purchase the right product at right cost.

Our services include,

- Largest selection of used product inventory from various used product online platforms and private sellers.
- Most comprehensive selection of buying and selling tips on each product.
- Most complete research and compare tools, including reviews, photos, videos and more.
- Right product pricing, including experts’ special reports (for in-demand products).
- Safety information and warranty and guarantee reports.

## 6. Project Scope

The proposed application by the business (client) will involves following functions.

- The application will have a universal search bar which can be used to search various number of product list from the database.
- Once the product is selected then the application will ask for more details on the used product selected like the initial date of purchase, wear n tear details, number of owners, etc.
- Then once the user submitted these details the potential product price is displayed in the front end with some tips and suggestions to users. While, in background the product price is calculated using machine learning techniques and data prediction methods to arrive at a suggestion.

The following are the unique features which will be available in the application.

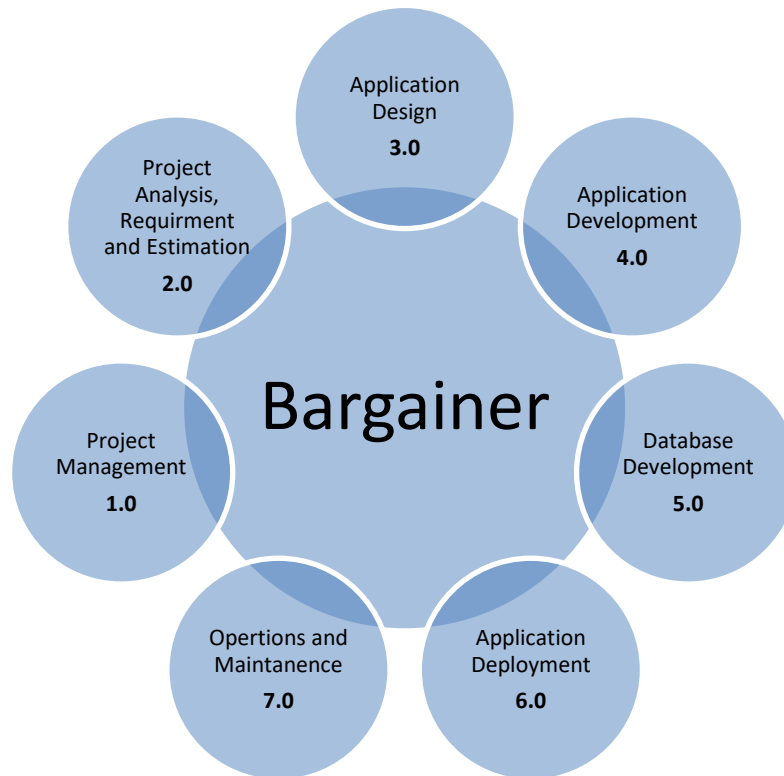
- Will provide a one of its kind unique platform for the users to find suggestions for the used product price quoting.
- Will provide platform for product experts to monetize their skill in turn helping the people who needs expert help.
- State of the art machine learning techniques to predict the product price based on historical data sets available.
- Can list any variety of product from any category.
- Additional tips and information to users while negotiating price and enquiry tips while accessing the product.

Application working and outcomes:

- The application provides exact suggestion on used products based on your filtered search criteria.
- The processes involved in qualifying a used product from our inventory ensures that the product buyers get suggestion based on the quality.
- We get information on used product from our 3<sup>rd</sup> party data repository and user inputs which provides us with data on the product to provide information on the product.
- We use a pricing algorithm to determine what product is worth and what we can offer you as a guaranteed value based on product usage and condition.
- We provide an expert's advice based on different categories like brand, wear and tear, external appearance, internal mechanics, and usage.
- We customize a targeted marketing program for the used product.
- We believe in offering a best price will make you expert and negotiate for it. After all, everyone deserves the best price.

## 7. Project Work Breakdown Structure

Breaking work into smaller tasks is a common productivity technique used to make the work more manageable and approachable. The lifecycle of Bargainer application development is shown as,



The project Work Breakdown Structure (WBS) for Bargainer is simple and efficient and composed of seven main phases of the project, the detailed view of work breakdown structure is given by,

Mobile Application for Bargainer	
<b>1.0 Project Management</b> <ul style="list-style-type: none"> <li>• Project Initiation</li> <li>• Project Plan Documentation</li> <li>• Project Schedule Development &amp; Management</li> <li>• Status Reporting</li> <li>• Risk Management</li> <li>• Subcontract Management</li> <li>• Project Meetings</li> </ul>	<b>2.0 Project Analysis, Requirements and Estimation</b> <ul style="list-style-type: none"> <li>• Use Case Meetings</li> <li>• Use Case Documentation</li> <li>• Requirements Meetings</li> <li>• Requirements Documentation</li> </ul>



<ul style="list-style-type: none"> <li>• Project Closeout</li> </ul>	
<b>3.0 Application Design</b> <ul style="list-style-type: none"> <li>• Database Design Meetings</li> <li>• Database Design Documentation</li> <li>• Application Design Meetings</li> <li>• Application Design Documentation</li> <li>• System Architecture Design Meetings</li> <li>• System Architecture Design Documentation</li> <li>• System Integration Design Meetings</li> <li>• System Integration Design Documentation</li> </ul>	<b>4.0 Application Development</b> <ul style="list-style-type: none"> <li>• Programming <ul style="list-style-type: none"> <li>○ Programming for Module A - Search</li> <li>○ Programming for Module B – Filters</li> <li>○ Programming for Module C – Comparison</li> <li>○ Programming for Module D – Expert Suggestion</li> <li>○ Programming for Module E - Payment</li> <li>○ Programming for Application Integration</li> </ul> </li> <li>• Code Reviews</li> <li>• Application Testing <ul style="list-style-type: none"> <li>○ Test Documentation</li> <li>○ Factory Testing</li> <li>○ Issue/Bug Resolution</li> <li>○ Site Acceptance Testing</li> </ul> </li> </ul>
<b>5.0 Database Development</b> <ul style="list-style-type: none"> <li>• Pilot</li> <li>• Data Conversion/Migration</li> <li>• Data QA/QC</li> </ul>	<b>6.0 Deployment</b> <ul style="list-style-type: none"> <li>• Release Planning &amp; Management</li> <li>• Issue/Bug Management</li> <li>• Server Management</li> <li>• Source Code Management</li> <li>• Database Management</li> <li>• Install Documentation</li> <li>• Installation</li> <li>• Help &amp; Training Material Documentation</li> <li>• User Training</li> </ul>
<b>7.0 Operations &amp; Maintenance</b>	

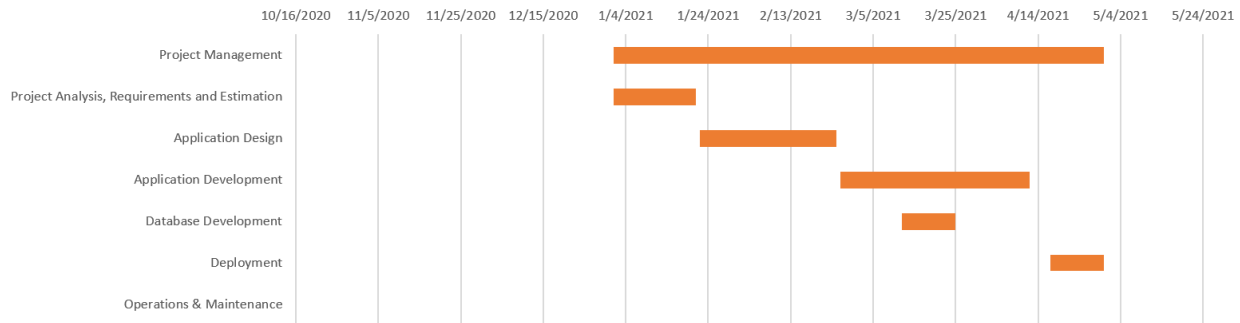
- System Administration
- System Tuning
- User Support
- Help Desk

## 8. Project Schedule

Project Bargainer, duration will be of three months, September 28, 2020 will be start of the project. The estimated finish date of the project will be the December 28,2020. The project will be ready and available for customers by end of this year. As mentioned before and in correlation with the WBS, the project is composed of seven main phases. The following table shows the start and finish estimate date for each part.

Phase	Module	Start Date	End Date
1	<b>Project Management</b>	01/01/2021	04/30/2021
2	<b>Project Analysis, Requirements and Estimation</b>	01/01/2021	01/21/2021
3	<b>Application Design</b>	01/22/2021	02/24/2021
4	<b>Application Development</b>	02/25/2021	04/12/2021
5	<b>Database Development</b>	03/12/2021	03/25/2021
6	<b>Deployment</b>	04/17/2021	04/30/2021
7	<b>Operations &amp; Maintenance</b>	04/30/2021	Till Future Iterations

The above table is represented in a series of Gantt chart below where the role of project management starts from initial to final stages of the project and the operations and maintenance will kick in after the deployment and goes till the application is used.

**Gantt-Chart for Schedule:****9. Milestones**

The following are the projected milestones in our project rollout involving various stages of mobile application development.

<i>Event or Deliverable</i>	<i>Target Date</i>	<i>Responsibility</i>
Business Analysis	01/01/2021	Business Analyst / Project Manager
Project Planning	01/15/2021	Business Analyst and developers and designers
Application Prototyping	01/22/2021	Business Analyst and Designers
User Interface design	02/01/2021	Designers
User approval	02/20/2021	Client / Business Users
Development / Coding	02/25/2021	Developers
Unit Testing Report	03/24/2021	Testers
Integration Testing	03/26/2021	Developers and testers
White Box Testing	03/30/2021	Developers and testers
Black Box Testing	04/07/2021	Testers
User Acceptance Testing	04/12/2021	Test users
Project Rollout	04/17/2021	Consulting company (Project owners) developers and testers
Production Hypercare	04/18/2021	Developers and Testers
Customer acceptance	04/20/2021	User
Enhancement	04/25/2021	Developer and Testers
Project closed out	04/30/2021	Project Owners

Maintenance	Till contract ends	Consulting company (Project owners)
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## 10. Resources

The following are the various resources which are involved in developing the bargainer mobile application the resources listed below are key resources which directly and in-directly influence the outcome of the project.

<i>Resource</i>	<i>Description and Source</i>
Human	2 Developers, 2 Testers, 1 business analyst and 1 manager, Business owners, Consultant (Project Owners), test users
Software's	Adobe experience design, proto.io, JIRA, Android studio, Oracle server, MS Project, Skype, payment gateway, MS office
Hardware	5 laptops, 2 tb server, printer, scanner, internet router, tables, chair, Telephones, Web cameras, Tablet, smartphones, projector
Facility	Office building, meeting rooms

The following table displays in detail every resource needed for the completion of the project.

<b>Name</b>	<b>Category</b>	<b>Unit</b>	<b>Type</b>	<b>Rate/hr.</b>
Student 1	Project Manager	1	Human	\$60
Student 2	Business Analyst	1	Human	\$60
Student 3	Developer	1	Human	\$50
Student 1	Developer	1	Human	\$50
Student 2	Tester	1	Human	\$40
Student 3	Tester	1	Human	\$40
Web Development Software - Adobe	Web Design	1	Software	\$2500
proto.io	Drawing Tool	2	Software	NA
Android Studio	Development	2	Software	\$5000
Data Analytical Tool	Analytics	1	Software	\$3000
JIRA	Monitoring and Ticketing Tool	1	Software	\$7000

MS Project	Resources and Time Management	1	Software	\$5000
MS Office	Resources and Time Management	1	Software	\$5000
Oracle Server	Database	2	Software	\$1000
Test Software	Testing	2	Software	\$1000
Cybersecurity Software	Security	1	Software	\$100
Skype/Zoom	Communication	15	Software	NA
Payment Gateway	Checkout	3	Software	\$ 5000
YouTube	Video	NA	Marketing	\$ 1000
Facebook	Social Media	NA	Marketing	\$ 1000
Instagram	Social Media	NA	Marketing	\$ 1000
Twitter	Social Media	NA	Marketing	\$ 500
LinkedIn	Social Media	NA	Marketing	\$ 500
Posters	Broadcasting	NA	Marketing	\$ 100
Billboards	Broadcasting	NA	Marketing	\$ 2000
Radio	Broadcasting	NA	Marketing	\$ 1000
Newspaper	Broadcasting	NA	Marketing	\$ 1000
Search Engine	Web	1	Marketing	\$ 5000
Laptops	Hardware	5	Hardware	NA
Scanning Machine	Hardware	1	Hardware	\$ 10
Database Server	Hardware	1	Hardware	\$ 80
Router	Hardware	1	Hardware	\$ 10
Printer	Hardware	1	Hardware	\$ 20
Table / Chair	Environment	5	Hardware	NA
Telephones	Environment	5	Hardware	NA
Mobile Phones	Deployment Tool	5	Hardware	\$1000
Web Cameras	Meeting	1	Hardware	\$500
Projector	Meeting	1	Hardware	\$500

## 11. Project Budgeting and control

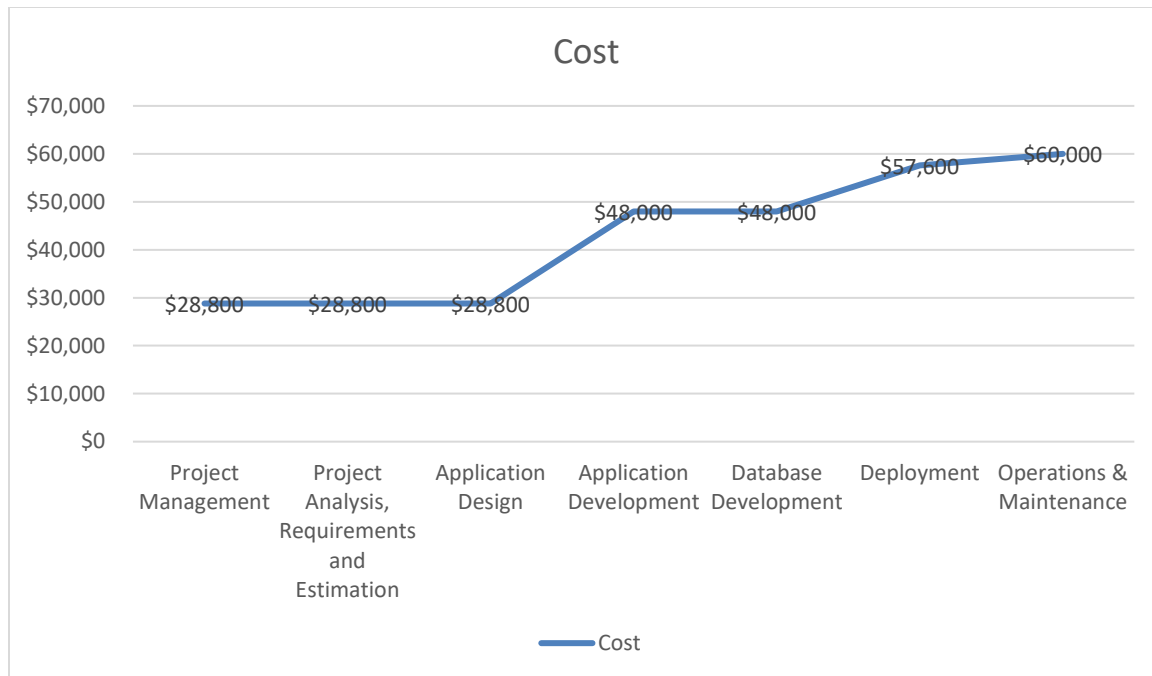
Project Bargainer includes seven phases, and each phase requires certain amount of budget to complete and proceed in project development. The resources used in project development is causes the team to concentrate on budgeting and control over budget. As Project Bargainer includes these many phases, budgeting should be maintained accurate and usage of resources should be controlled to meet customer expectation. As given in Resources section, we have human cost, software, hardware, and facility costs.

Project Bargainer, a mobile application used to find new and used products over the web with intelligent suggestions, on demand expert's advice on each product listed. This application involves development cost and usage cost. As the number of users increase the maintenance cost also increases. As you can see in Work Breakdown section, after application deployment, the operation and maintenance phase take more budget even though its after development phase. Hence, it is difficult to estimate the exact maintenance cost of the project.

The following table shows the total necessary budget for the completion of each part, taking into consideration only the cost of human resources.

Phase	Cost
Project Management	\$ 28,800
Project Analysis, Requirements and Estimation	\$ 28,800
Application Design	\$ 28,800
Application Development	\$ 48,000
Database Development	\$ 48,000
Deployment	\$ 57, 600
Operations & Maintenance	\$ 60,000
Software's	\$ 34,600
Hardware's	\$ 2,110
Facility	\$ 8,000
Marketing	\$ 15,100

The most expensive phase will be the Operations & Maintenance phase. Regardless of its cost, this phase is indispensable for the project as will ensure its correct performance before it is offered to the customers. As a conclusion of the information shown above, the total cost of the human resources for this project is of \$ 3,59,820.



To effectively control the budget using the Earned Value Method, Student 1 (project manager) will record weekly data to build the Cumulative Actual Cost (CAC) graph and the Cumulative Earned Value (CEV) graph.

With this information, Student 1 will calculate the Schedule Variance (SV) and the Cost Variance (CV), as well as the Cost Performance Index (CPI) and Schedule Performance Index (SPI). If at any point during the project, these calculations show that the project is over budget at more than 5% or is behind schedule at more than 20%, he will need to make the necessary changes to ensure that the Budget at Completion (BC) does not vary.

With everything in above table, the total budget for this project is \$ 3,59,820.

## 12. Project Monitoring and control

For a successful project, there should be some best practices to implement a good project monitoring and controlling. Because monitoring and controlling activities check if there are deviations from the expected results of the project. Necessary steps, control points, and actions are taken to monitor and control the project. You should measure the performance to check whether the project is going well.

Project monitoring and control is performed throughout the life cycle of the project. Student 1 (Project Manager) will be responsible for monitoring the project progress and development. It is

important that changes are identified and implemented as early as possible to minimize the impact or damage or loss of the overall project.

We are using tool called JIRA to monitor the progress of the project.

Any changes either minor or major must go through change request process through JIRA. It should pass through following steps.

- 1) Create RFC (Request for Change) ticket in JIRA with the supporting documents which includes deployment steps, root cause analysis document and impact analysis document.
- 2) Get it approved from Project Manager (Student 1) and analyst of the project.
- 3) Once the RFC has been approved, deploy the changes, and upload all the necessary documents such as test cases, root cause analysis document, impact analysis document, approvals to the share point.
- 4) Perform end to end testing again after changes have been deployed and submit test results to Project Manager.
- 5) Maintain an Issue log document to record all the changes that have been done as part of this project.
- 6) Maintain a separate document to capture how these changes have been deployed and what lesson has been learnt from the issue.

Once the project deliverables are completed, they are presented to the customer. If the deliverables meet the requirements agreed with the customer, in the beginning, the customer accepts the project and closing phase is triggered. Quality control activities check the quality attributes of the delivered outputs. After project deployment, reserves are planned to accommodate costs of risks and unexpected situations in projects.

Following successful monitoring and controlling process, the whole project has a better chance to be a success and meet customer expectations.



### **13. Communications and project status reporting**

Project status report is an analytical tool that collects information on the current state of your project. They are used to capture the project's current progress, which then allows you to communicate that data to the team, project manager and stakeholders in the form of charts and graphs. Good communication and project status reporting can greatly help us improve the efficiency of our work. A project status report includes all the business-critical efforts, progress, and risk associated with the project. A project status report may be used to,

- Streamline communication efforts across the organization and stakeholders.
- Make it easier to gather and disseminate information about key elements of the project.
- Ensure stakeholders have all necessary information for decision-making.
- Amplify key messages and goals around the project.
- Act as a record-keeper of past events, actions, and decisions.

Project Bargainer will have a progress or status update reports every day and weekly to share what has been achieved and what is the next step and what mistakes had occurred and how they are corrected.

The status report will be including the following details, in order get detailed information in any tasks done.

- Summary – includes key elements of the project tasks condensed in short to capture the highpoints in your schedule, budget, and costs for stakeholders.
- Tasks – Work assigned which gives information on overdue and when their deadline is to never lose track of progress and stay on schedule.
- Milestones & Summary Tasks - Note which milestones have been completed to better track the project's progress. View where you are in terms of completing summary tasks or subtasks on schedule.
- Planned Vs. Actual – to know project variance by tracking the actual progress on the status report, which is compared to where planned to be at that point in schedule.
- Additional notes or highlights

The status report in Project Bargainer will be given by the Project Manager (Student 1) and will be sent by email to the following stakeholders.

- Business Owners
- Project Owners
- Business Analyst
- Developer's
- Tester's

Project Manager (Student 1) will have a skype conference with the Stakeholders to discuss the status report. Within the project members, the status report will be discussed in a meeting that will be set every week. Project members will communicate daily through in person meetings or skype calls and will set weekly meetings to gather information about the project status and issues and problems among members might have will be handled in these meetings.

Despite status reports nor weekly reports, every important update regarding the project will be sent to all stakeholders, in the following occasions,

- 1) In the beginning of the project
- 2) At the completion of each phase
- 3) If the Earned Value (EV) differs from the Planned Value (PV) in more than 15%, including action taken to mitigate damage.
- 4) If the Actual Cost (AC) differs from the Planned Value (PV) in more than 10%, including action taken to mitigate damage.
- 5) At the completion of the Project.

#### 14. Project Risks

In the modern enterprise, mobile apps have surpassed luxury and have now assumed the position of necessity. With a range of specialized uses, mobile applications have become synonymous with seamless communication and business operations.

With that being said, the immense application of modern age technologies has its share of risk that needs to be addressed effectively if it may occur in the future.

PITFALL	IMPACT	PROBABILITY	MITIGATION
(Building an app that end users do not really want) or	App is downright rejected in the market.	Low to medium.	Seek input from employees about how the app can better address their needs

(addressing a need that users did not really know they had.)			during early stages of development of app.
Adding too many features while designing the application.	User finds it hard to navigate through the application.	Medium.	Consider testing it to few users before deployment.
Believing that the app created is perfect before customers even give feedback.	User Centric issues being generated time and time again	Medium	Listen to the users for their feedback for any room for improvement.
Not having a proper vision for the app design/ Measuring your app against competitor business	Confusing mess of a final product, waste of time and capital	Medium to high.	Take time to realize do you really need an application for the need, researching intensely and acting on the data.
Securing user data and database with proper encryption standards to hide from third party invaders.	Important data is leaked using user-confidential information.	High	Hiring someone as a developer who has sufficient experience and knowledge.

## 15. Assumptions and Dependencies.

As we are limited people in our team, we must employ ourselves effectively. For that, each person should be capable of doing at least 2 activities. Testing needs to be done continuously. So, we assumed developers should have knowledge in testing.

Users on most part, will not create an account for viewing information they need unless the app is worth doing it. So why not give access to most of the information in a mode called “Guest Mode”.

Creating the app which works for everyone. Effacing the myth what works for one will work for everyone. We must create a universally usable prototype.

Most of the data that we will work upon will be collected from other repositories of organizations that deal with similar data every day.

Advertisement will be done by the company for which we are designing the project through their portals, websites, social media, and paid ads.

- **Assumptions:**

- AS-1: Developers can also perform testing.
- AS-2: Users can view the data with Guest Mode (No need of creating an acc every time)
- AS-3: App can be used by anyone rather than targeting specific individual.
- AS-4: Data needed for testing purposes is given by other organizations.
- AS-5: Our client will advertise about us.

- a. **Dependencies:**

- b. DE-1: The code that is written by us and the 3<sup>rd</sup> Party organization.
- c. DE-2: Application can be seen in Android & iOS phones app store.
- d. DE-3: Any changes made to the app after rollout due to customer feedbacks.
- e. DE-4: Ads displayed in the application.

## 16. Constraints:

There are various constraints which can potentially affect various phases of the project. Some of which are.

<u>Dimension</u>	<u>Constraint</u> (state limits)	<u>Driver</u> (state objective)	<u>Degree of Freedom</u> (state allowable range)
<b>Features</b>	Initially available only as a mobile application later and may miss interactive graphical features in the initial version	Build a complete application with working basic functionalities	Basic functionality will be made available with above average user interface
<b>Quality</b>	May face slowness if unprecedented number of users start using the application in initial days	Should be ready to handle more load in server or should be ready to move the server to cloud if necessary	The server load will be set to handle 50000 users at a time based on initial projection

<b>Cost</b>	May need spend more on data scientist if the process becomes more complex	Should produce solid performing application	To provide better product quality cost overrun up to 20% can be considered with permission from client
<b>Schedule</b>	Testing should be successfully completed without any issue	release 1.0 to be available by 16/04, release 1.1 by 17/04	Cannot push the deployment beyond 28/04
<b>Staff</b>	Sometimes the resource available will not be expert in specific function of the development process	Hiring resource who have expertise in end-to-end application implementation	Maybe resource can be trained in few simple modules, but major module requirement is must

### 17. approvals:

The approval chain for our project is mentioned as below with appropriate dates

<u>Role or Title</u>	<u>Name and Signature</u>	<u>Date</u>
Team Lead		04/17/2021
Project Manager		04/19/2021
Project Owner (CEO of The Contracting Company)		04/22/2021

Business Analyst		04/25/2021
Product Owners (Client)		04/28/2021

**18. Revision History:**

Name	Date	Reason for Changes	Version
Bargainer	04/30/2021	Initial Deployment	1.0