RideGo

A simple way to community-based Rideshare.

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Feasibility Analysis Report

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1. Feasibility Analysis

a. Feasibility Analysis Concept

- A feasibility study is a preliminary exploration of a proposed project or undertaking to determine its merits and viability.
- A feasibility study aims to provide an independent assessment that examines all aspects of a proposed project, including technical, economic, financial, legal, and environmental considerations.
- The main purpose of a feasibility study is to assess the financial viability of developed land and whether it will be a success or failure.

b. Type of Feasibility

i. Economical/ Financial

- Known as cost-benefit analysis.
- To determine costs/Expenses VS. Benefits/Revenue.
- Determine the Profit/Loss of the proposal.

ii. Technical / Technological

- Checks whether the Existing Technology supports the Proposed system or not.
- Major areas of consideration: existing Technology, Hardware etc

iii. Behavioral

- Estimating the Reaction/Acceptance of Proposed software/system from a User perspective

2. Financial Feasibility

a. Cash Flow Method

	Month 1	Month 2	Month 3	Month 4	Month 5
Expense	90$	130$	140$	150$	120$
Revenue	40$	90$	150$	220$	280$
Cash Flow	(50) $	(40) $	10 $	70 $	160 $
Accumulating Cash Flow	(50) $	(120) $	(110) $	(40) $	120 $

Expense:
Month 1: Server Cost
Month 2: Server Cost + Promotion Cost
Month 3: Server Cost + Collaboration Cost
Month 4: Server Cost + Maintenance Cost
Month 5: Server Cost

Revenue:
Month 1: Ads Revenue
Month 2: Ads Revenue
Month 3: Ads Revenue + Sponsorship
Month 4: Ads Revenue + Sponsorship
Month 5: Ads Revenue + Subscription

b. NPV Method.

	Month 1	Month 2	Month 3	Month 4	Month 5
Expense	90$	130$	140$	150$	120$
Revenue	$40	$90	$150	$220	$280
Expenses (NPV)	$90	$128.93	$137.69	$146.31	$116.08
Revenue (NPV)	$40	$89.26	$147.53	$214.59	$270.86
Cash Flow (NPV)	$(50)	$(39.67)	$9.84	$68.28	$154.78
Accumulating Cash Flow (NPV)	$(50)	$(89.67)	$(79.83)	$(11.55)	$143.23

Interest Rate: 10% (Yearly)
0.83% (Monthly)

3. SWOT Analysis

Strength	Weakness
•Enthusiast about Ride sharing platforms. •Can spend a long time on this project. •Small team size.	•Lack of knowledge among the team member. •Low fund.
Opportunity	**Threats**
• Community-based Sharing platform. •Revenue increasing proportionally to members increasing.	•Limited no of clients as a new app. •Too many similar apps are available.

4. Feasibility Report

a. Pros (Project View)

i. Especially based on a community for using this platform. So the community will get a premium Ride Sharing Platform.

ii. Revenue increases when members of the platform increase.

iii. There are lots of people who are enthusiastic about Ride sharing platforms. So there is a possibility of getting a good number of users.

iv. Can spend a long time on this project because lots of features to develop.

v. Small team size so easy to handle.

b. Cons (Project View)

i. Lack of knowledge among the team member about doing large-scale projects.

ii. Low funds for doing the project. So it will be impossible to make it available on a large scale.

iii. Limited no of clients because we have no marketing team for the product.

iv. It's a direct threat that there are lots of similar million-dollar apps and projects available. It may not be possible for us to survive in the field.

c. Project outsourcing

i. Can get good quality-based Software.

ii. The project could be well structured.

iii. Higher Cost

d. Project Insourcing

i. Software Quality would be average.

ii. Small member. So, low cost.

e. Conclusion

i. Though our project is based on Ride sharing and we are doing it all on our own. So there is a slight issue with the budget. Our fund is minimum. We would like to cost-cutting in every way it can be possible. So if we chose the outsourcing option then it will be difficult to manage the budget. So as a beginner, our recommendation will be the Insourcing option.

5. UI Design

a. UI Design Definition

i. A user interface is the part of the system with which the users interact.

ii. The user interface design defines the way in which the external entities will interact with the system and the nature of the inputs and outputs that the system accepts and produces.

b. Three Golden Rules of UI Design.

i. Place User In Control

- Modeless.
- Flexibility.
- Interruptible.
- Helpful.
- Forgiving.
- Navigable.
- Accessible.
- Facilitative.
- Preferences.
- Interactive.

ii. Reduce User Memory Load

- Relieve short-term memory.
- Rely on recognition, not recall.
- Provide visual cues.
- Forgiving. Frequency.

- Promote an object-action syntax.
- Use real-world metaphors.
- User progressive disclosure Organize

iii. Make The Interface Consistence

- Continuity.
- Maintain consistency within and across products.
- Keep interaction results the same.
- Provide aesthetic appeal and integrity.
- Encourage exploration.

c. Norman's Design Principles (1988)

i. Visibility: Can I see it?

- Users need to know what all the options are, and know straight away how to access them. The clearer and more visible functions are; the more likely users will be able to know what to do next.

ii. Feedback: what is it doing?

- Feedback is about sending back information about what action has been done and what has been accomplished, allowing the person to continue with the activity.

iii. Affordance: Is it self-descriptive?

- Affordance is the link between how things look and how they're used.

iv. Mapping: where am I and where can I go?

- This refers to the relationship between controls and their effects in the world. Nearly all artifacts need some kind of mapping between controls and effects, whether it is a flashlight, car, power plant, or cockpit.

v. Constraints: why can't I do that?

- This refers to the relationship between controls and their effects in the world. Nearly all artifacts need some kind of mapping between controls and effects, whether it is a flashlight, car, power plant, or cockpit.

vi. Consistency: Have I seen this before?

- A consistent interface is one that follows rules, such as using the same operation to select all objects.

d. Conclusion.

- So there are many UI design principles that we can follow. Here we address 2 of them. And from these 2 principles, we will choose, The Three Golden Rules of UI Design

Group Task Division

Group Member	Task
Md Rokibul Hasan (011193040)	**Use Case Descriptive form, Research Paper, Comparison table, Features list fixation, Feasibility Analysis, Financial Feasibility, SWOT Analysis.**
Md. Mansurul Haque (011202034)	**Online Article, Gap Analysis, Benchmark product.**
Md Rajib Hossen (011191244)	**Data Flow Diagram, Benchmark Product, UI Design Principle.**
Muminul Islam (011202115)	**Activity Diagram, Swimlane, Benchmark Product. Feasibility Report - Project Outsourcing, Project Insourcing, Conclusion.**
Emam Hasan (011201302)	**Context Diagram, Use Case Diagram, Research Paper, Feasibility Report - Pros and Cons(Project View).**