
ConnectEZ – Online Virtual Phone System

PROJECT CHARTER

1.0.0

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Team Cosmos

VERSION HISTORY

Version #	Implemented By	Revision Date	Approved By	Approval Date	Reason
1.0	Bhautik Sojitra, Kabir Bhakta, Yirong Wang, Vrushil Patel, Heejeong Kim	09/27/2023	Group	09/28/23	Initial Version

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1 INTRODUCTION

1.1 PURPOSE OF PROJECT CHARTER

The "ConnectEZ" project charter, developed during the Initiating Phase, serves as a comprehensive document that encourages project organization and aligns team members. It outlines objectives, features, deliverables, deadlines, risks, assumptions, and goals, promoting clarity and alignment among stakeholders. This charter equips decision-makers with the necessary information to approve project funding, encompassing needs, scope, justification, and resource commitment, thus enabling efficient decision-making and ensuring project success.

2 PROJECT AND PRODUCT OVERVIEW

The "ConnectEZ" project, led by Pengfei He, is an innovative endeavor aiming to build an advanced virtual phone system. This project, catering to a broad audience, strives to enhance internet-based telephony, making it more accessible and mobile-friendly. It commenced with an MVP phase of 6 months, allocated a budget of \$120K. Subsequently, it will continue for an additional year to complete the product, resulting in an overall budget of \$500K. The project will start in September 2023 with a targeted project duration of 18 months.

3 JUSTIFICATION

3.1 OBJECTIVES

- Our objective is to develop a user-friendly online virtual phone service that captures more than 10% of the market share and maintains a 95% system uptime rate. This service will enable users to make and receive calls using a single business phone number across different devices, such as desktop applications and mobile phones. Our aim is to achieve this within the next 18 months. Accomplishing this goal will not only enhance communication speed for users but also contribute to the company's sustainable growth and profitability.

3.2 HIGH-LEVEL REQUIREMENTS

The following table presents the requirements that the project's product, service or result must meet in order for the project objectives to be satisfied.

Req. #	Requirement Description
1	Develop a user-friendly virtual phone system with calls and text.
2	Create a user account management system.
3	Complete the MVP within 6 months with a \$120,000 budget.
4	Finalize the product within a year with a total budget of \$500,000.
5	Cater to a diverse user base, ensuring compatibility with all user profiles.
6	Track call durations for billing and support geographical location-based billing.
7	Offer PayPal for the MVP and expand payment options to include major credit/debit cards.

Req. #	Requirement Description
8	Prioritize system security.
9	Provide customer support for technical and billing issues.
10	Ensure full functionality and meet the 18-month project timeline.
11	Billing should be able to be issued automatically.
12	Administrators can be able to set a value for the maximum number of calls allowed.
13	Users should be able to change their phone number but cannot pick.
14	Require people who are already trained before the app release to support.

3.3 MAJOR DELIVERABLES

The following table presents the major deliverables that the project's product, service or result must meet in order for the project objectives to be satisfied.

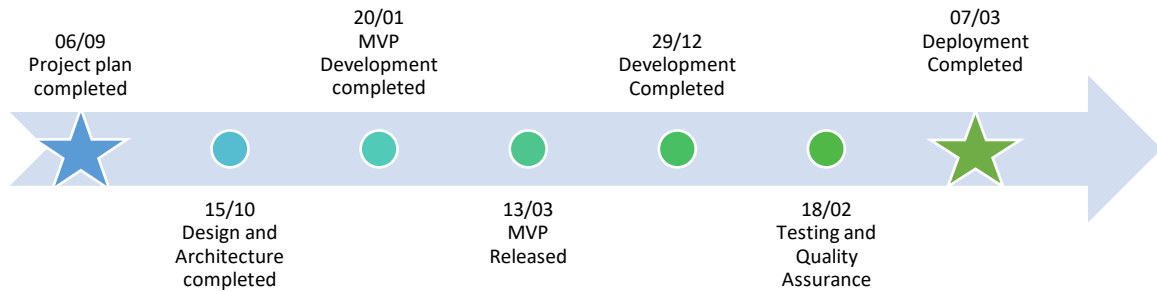
Major Deliverable	I Deliverable Description
Financial Budget Report	Project financial report that tracks all the expenses to ensure that the project stays within budget.
Training Materials	Training materials to help learn new systems for users.
Design Report	A design report that includes system details, technical details, hardware and software requirements.
Applications	Client applications to enable users to make and receive calls such as smartphones, laptops, and desktop computers.
Billing System	Billing system to keep track and record call details to issue bills for users automatically.
Final Project Report	A report to summarize the entire project, including all the objectives, and achievements for the project evaluation.
Testing Report	A testing report of the project processes including various test cases and outcomes to ensure the project's reliability and check if the project meets all the predefined requirements.
Security Report	Security report that evaluates the project's security measures including risk assessments and testing to ensure that data are protected safely.
Presentation	Presentation to show project information including the project's objectives, its progress, and the outcomes achieved to stakeholders and team members.

3.4 SCOPE

In Scope	Development of all required features
	User Interface (UI) and User Experience (UX) Design
	User Account Management
	Cross-Platform Compatibility
	Delivery complete Android, iOS, and desktop apps
	System Maintenance and Updates
	Security and Support
	Billing and Payment
Out of Scope	Advanced Features like screen share
	Third-Party Integration
	Hardware Development
	Marketing and User Acquisition
	On-site training for users

4 DURATION

4.1 TIMELINE



Phase	Description
Project Initiation and Planning	Define objectives, scope, and requirements. Create a detailed project plan. Allocate resources and roles.
Design and Architecture	Develop the system architecture. Design the user interface and experience. Define the database structure
Development	Build server components and client applications. Implement core features including voice calling. Develop user management, call routing, and billing systems.
MVP Release	Focus on essential features for the MVP. Test and validate the MVP with a limited user group. Refine based on feedback.
Testing and Quality Assurance	Conduct comprehensive testing. Address identified issues and bugs.
Deployment	Deploy the system to production servers. Full-scale launch to all users
Post-Launch Optimization and Updates	Continuously monitor performance and gather user feedback. Implement updates and enhancements as needed.

4.2 EXECUTIVE MILESTONES

In the context of the ConnectEZ project, these milestones represent essential checkpoints in project progression. They are strategically placed to assist project executives in tracking progress, making well-informed decisions, and ensuring alignment with project goals and timelines. These milestones hold a pivotal role in guiding the project's direction and enabling effective leadership oversight.

The table below lists the high-level Executive Milestones of the project and their estimated completion timeframe.

Executive Milestones	Estimated Completion Timeframe
Project Concept Approval	Two weeks after project initiation
Detailed Project Plan	One month after project initiation
MVP Launch to limited users	Four Months after Design and architecture finalized
Project Development Complete	Nine Months after MVP Released
Full scale system deployment & Product launch on larger scale	Three months after Project Development

5 ASSUMPTIONS, CONSTRAINTS AND RISKS

5.1 ASSUMPTIONS

This section identifies the statements believed to be true and from which a conclusion was drawn to define this project charter.

1. Administrators have full control over the system, ensuring all the features work correctly. One assumption is that only one administrator will have access to the system at a time, even though the system can have more than one administrator.
2. The database is used to store the mappings for numbers to (IP Address, Port) pairs. An assumption that can be made here is that the system will ensure nothing disrupts the flow of information to and from the database.
3. It is assumed that no other feature will be added to the project after all the stakeholders have agreed to all the terms and conditions.
4. It is assumed that \$500,000 will be enough over a span of 18 months to complete the project.
5. It is assumed that the system will be fully protected against any form of data breach.

5.2 CONSTRAINTS

This section identifies any limitations that must be taken into consideration prior to the initiation of the project.

1. *Resource Constraint* - The development team must build a working client-server system within the first 6 months of the Project timeframe; The project manager will have to use the resources provided as efficiently as possible, if needed the project manager may also add some developers to the team.
2. *Time Constraint* - There might be time constraints on coming up with an error-free mapping algorithm for the phone numbers.
3. *Budget Constraint* - The project budget is \$500K. The project manager will have to keep track of all the costs and ensure the costs do not exceed the budget value.

4. *Technical Constraint* - There might also be a technical constraint. Such as having to work with a particular Integrated Development Environment (IDE), framework or database type.

5.3 RISKS

Risk	Mitigation
Scope Creep – Example: The users may want to add a feature that makes the system more useful, this might increase the time and cost.	Ensuring all the stakeholders agree to what the project requirements are during the very first phase.
Security risk – Unauthorized access to call records can compromise user data.	The developer team should come up with an end-to-end encryption for voice to ensure data is protected. Enforcing access control, to prevent any third party from gaining access to the system
Database Breakdown/Data loss	Ensure there is backup for the data found in the database in case of database breakdown.
Lack of support for users	Train individuals who can help customers with concerns related to using the system.
Market Competition	Our main goal is to attract as many users as possible. To fight the competition, we will build a customer-friendly easy-to-use UI and provide customer support.

6 PROJECT ORGANIZATION

6.1 STAKEHOLDERS (INTERNAL AND EXTERNAL)

Internal:

1. Project Manager
2. Project Sponsor/Product Owner
3. Product Development Team
4. Customer Support Team

External:

1. Users
2. Competitors
3. Community/Society
4. Regulators and Government Agencies

6.2 ROLES AND RESPONSIBILITIES

This section describes the key roles supporting the project.

Name & Organization	Project Role	Project Responsibilities
Pengfei He (TA), University of Manitoba	Project Sponsor	Person responsible for acting as the project's champion and providing direction and support to the team. In the context of this document, this person approves the request for funding, approves the project scope represented in this document, and sets the priority of the project relative to other projects in his/her area of responsibility.
Team Cosmos, Project Management Group	Project Manager	Person who performs the day-to-day management of the project and has specific accountability for managing the project within the approved constraints of scope, quality, time and cost, to deliver the specified requirements, deliverables and customer satisfaction.
Product Development Team	Developer	A person who performs the day-to-day development and maintenance of the project.
Customer Support Team	Project Team Member	Person responsible for assisting users with their issues or concerns.

7 PROJECT CHARTER APPROVAL

The undersigned acknowledge they have reviewed the project charter, authorized and funded the ConnectEZ project. Changes to this project charter will be coordinated with and approved by the undersigned or their designated representatives.

Signature: _____ Date: _____
 Print Name: _____
 Title: _____
 Role: _____

Signature: _____ Date: _____
 Print Name: _____
 Title: _____
 Role: _____

Signature: _____ Date: _____
 Print Name: _____
 Title: _____
 Role: _____

APPENDIX A: REFERENCES

The following table summarizes the documents referenced in this document.

Document Name and Version	Description	Location
<i>Project Document on Online Virtual Phone System (Version 1)</i>	<i>The document outlines the features and requirements of the project.</i>	https://umanitoba-my.sharepoint.com/:w:/g/personal/shaowei_wang_umanitoba_ca/EX6PKNTuX1hGomL4NyNYSIcBHq5ImCFI2BPrVJnFbBWIsQ?e=prDfNs