

# PROJECT PROPOSAL

R.P.D. Kumarasinghe  
140323F

## 1. Title of the project: Wi-Fi Communication platform

## 2. Overview of the Project

This is about sharing files and communicating without data charges using Wi-Fi in a user-friendly environment. So, the users can communicate with this like a messaging application with file sharing functionality in a local area network using Wi-Fi.

Main task is to develop windows application for personal computers. It is hope to developed for android and Linux in future.

In this system user's messages or data are the inputs and output is to send it to the destination person or the group of people.

## 3. Objectives of the Project

Objective of this project is to provide a simple and easy interface to the users to share the data and communicate via Wi-Fi. This system will provide a solution to fast file sharing and free chatting in a Local Area Network.

## 4. The Need for the Project

Nowadays people are using devices like laptops and mobile phones that has Wi-Fi functionality. But in computers it is still been used Bluetooth stock application if needed to share some files wirelessly. It is slow and not a much user friendly process. If this is done by Wi-Fi it will be faster than Bluetooth. Another problem in such applications that are already exist ask for another connection for that. But in this system, will be developed to use sharing functionality without having another network connection by using Wi-Fi hotspot of a using device.

## 5. Scope of the Project

Main user roles:        1. Sender  
                                 2. Receiver (in a conversation a person can act as both)  
Anyone in the same network can use this system.

Main functions:

1. Register user profile	2. Edit user profile
3. Create a hotspot	4. Connect to the network
5. Sending text messages	6. Receiving text messages
7. Sending files	8. Receiving files
9. Send voice	10. Receiving voice

## 6. Deliverables

This system will deliver a Standalone windows pc application

## 7. Overview of Existing Systems and Technology

Existing systems: Feem [1], Skype [2], Whatsapp [3], Viber [4], Facebook messenger [5]

Main differences with existing systems

Existing system	Existing system feature difference	This system feature
Feem	*Limited functionality to free users	*All functionality given for free and *Voice messages are available
Skype, Whatsapp, Viber, Facebook messenger	*Data charges apply *Can access anyone in the world *Providing real time calling	*No data charges *Can only access in the local network *Not Providing real time calling

This system will be developed using:

C# [6], Visual studio 2015[7], Metro UI framework [8], MS SQL [9]

## 8. References

- [1] FeePerfect “Faster Transfers” Internet: <http://tryfeem.com/> [Feb. 08, 2017]
- [2] Skype and/or Microsoft. “Celebrate the season together, wherever you are” Internet: <https://www.skype.com/en/> 2017 [Feb. 08, 2017]
- [3] WhatsApp Inc. “Simple. Secure. Reliable messaging.” Internet: <https://www.whatsapp.com/> 2017 [Feb. 08, 2017]
- [4] Viber Media S.à r.l. “Viber Connect. Freely.” Internet: <http://www.viber.com/en/> 2017 [Feb. 08, 2017]
- [5] Facebook. “Messenger” Internet: <https://www.messenger.com/> 2016 [Feb. 08, 2017]
- [6] Microsoft. “C#” <https://msdn.microsoft.com/en-us/library/kx37x362.aspx> 2017 [Feb. 08, 2017]
- [7] Microsoft. “Any Developer, Any App, Any Platform” Internet: <https://www.visualstudio.com/> 2017 [Feb. 08, 2017]
- [8] Dennis Magno. “Metro Modern UI - Metro Framework 1.4.0” Internet: <https://www.nuget.org/packages/MetroModernUI/> July. 19,2016[Feb. 08, 2017]
- [9] Microsoft. “SQL Server 2016” Internet: <https://www.microsoft.com/en-us/sql-server/sql-server-2016>. 2017 [Feb. 08, 2017]