**Chapter 1**

**Introduction**

**1.1 Motivation**

We are living in the 21st century, where technology is evolving every passing minute,. Social media is one of the best and the worst thing that happened to humans in this century. It’s very important to know the limits. The excessive use of social media is affecting the kids of this generation, they hesitate to have a conversation. This is affecting the students in classrooms where they fear to ask doubts, make new friends. It is important to address this issue and use this same technology to solve the current problem.

**1.2 Problem Statement**

The problem is here to create a platform that will help connect teachers and students in such a way that they could interact without any sort of hesitation. This platform should bridge the communication gap between both of them. It should also allow each of them to upload images and send text messages.

**1.3 Framework of the proposed work in project**

**1.3.1 MySQL**

MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed, marketed and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons:

* MySQL is released under an open-source license. So, you have nothing to pay to use it.
* MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
* MySQL uses a standard form of the well-known SQL data language.
* MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc.
* MySQL works very quickly and works well even with large data sets.
* MySQL is very friendly to PHP, the most appreciated language for web development.
* MySQL is customizable. The open-source GPL license allows programmers to modify the MySQL software to fit their own specific environments.

**1.3.2 XAMPP Server:**

* XAMPP is an open source software developed by [Apache friends.](https://www.apachefriends.org/download.html) XAMPP software package contains Apache distributions for Apache server, MariaDB, PHP, and Perl. And it is basically a local host or a local server. This local server works on your own desktop or laptop computer. The use of XAMPP is to test the clients or your website before uploading it to the remote web server. This XAMPP server software gives you the suitable environment for testing MYSQL, PHP, Apache and Perl projects on the local computer.
* The full form of XAMPP is X stands for Cross-platform, (A) Apache server, (M) MariaDB, (P) PHP and (P) Perl. The Cross-platform usually means that it can run on any computer with any operating system.
* Next MariaDB is the most famous database server and it is developed by MYSQL team. PHP usually provides a space for web development. PHP is a server-side scripting
* language. And the last Perl is a programming language and is used to develop a web application. The XAMPP installation process is very simple and fast. Once XAMPP is installed on your local computer it acts as a local server or localhost. You can test the websites before uploading it to the remote web server. This XAMPP server software gives you a suitable environment for testing MYSQL, PHP, Apache and Perl applications on a local computer.

**1.3.3 PHP:**

* PHP is typically used as a server-side language (as opposed to a language like JavaScript that’s generally executed on the client-side). So what does that mean? In programming terms, client-side refers to website activity that takes place locally on a user’s computer through the user’s web browser. Client-side languages like HTML, CSS, and JavaScript give instructions that web browsers can parse and translate into content on your computer screen. Notice JavaScript (a scripting language like PHP) is on that list. Again, the processes scripted by JavaScript take place on the client-side—JS provides instructions that can be understood by and executed in your web browser. Client-side is the side you see when you’re using the internet.
  + 1. **Visual Code Studio:**
* Visual Studio Code combines the simplicity of a source code editor with powerful developer tooling, like IntelliSense code completion and debugging.
* First and foremost, it is an editor that gets out of your way. The delightfully frictionless edit-build-debug cycle means less time fiddling with your environment, and more time executing on your ideas.
* Available for macOS, Linux, and Windows
* Edit, build, and debug with ease
* At its heart, Visual Studio Code features a lightning fast source code editor, perfect for day-to-day use. With support for hundreds of languages, VS Code helps you be instantly productive with syntax highlighting, bracket-matching, auto-indentation, box-selection, snippets, and more. Intuitive keyboard shortcuts, easy customization and community-contributed keyboard shortcut mappings let you navigate your code with ease.
* Customize every feature to your liking and install any number of third-party extensions. While most scenarios work "out of the box" with no configuration, VS Code also grows with you, and we encourage you to optimize your experience to suit your unique needs. VS Code is an open-source project so you can also contribute to the growing and vibrant community on GitHub.
* Built with love for the Web. Code includes enriched built-in support for Node.js development with JavaScript and TypeScript, powered by the same underlying technologies that drive Visual Studio. VS Code also includes great tooling for web technologies such as JSX/React, HTML, CSS, SCSS, Less, and JSON.