



# UNIVERSITY OF KASHMIR

Main Campus Hazratbal, Srinagar,  
Department of Computer Science.

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## SYNOPSIS FOR M.C.A PROJECT

Project Title	Building Restful Api For Real-time Chat Application.
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## *Internship outline*

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Our internship is divided into 3 phases and they are:

Phase 1: In first phase we learn the basics of technologies we are going to work with.

Phase 2: In next phase we write sample programs in the technologies that we learned.

Phase 3: In last phase we implement the knowledge by solving a real world problem.

Project: Restful Api for real-time chat application.

## *Introduction*

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Real-time chat is a communication hub where interns and employees can communicate and collaborate with teams, share files.

All of these features need a dynamic data to work with like list of currently logged in users, chat history of users, list of admins, sharing of company

data e.t.c. This dynamic data can be maintained and manipulated across different platforms with Restful Api.

## *Problem*

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Real time applications are gaining more relevance, with the fact that organizations want more seamless and timely view of their huge data stores and associated analytic.

Modern real time applications should provide good resource consumption, user interactivity and performance, while being more flexible, maintainable and scalable. All of this can be achieved by building a Restful Api.

## *Objectives*

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In this project, we demonstrate a real time application where we specifically develop a multi user application which will enable users to chat with each other in real time. The application will demonstrate features like user Authentication and Authorization, and OAuth integration with popular third party applications.

My role would be to provide front-end developer an interface with which they can access the data from the back-end in the form that is easy to use and parse.

## *Technologies*

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The technologies that I would be using as a back-end developer in this project are the following:

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|-------------------|----------------------|
| <i>1. Python</i>  | <i>4. Nginx</i>      |
| <i>2. FastApi</i> | <i>5. Postgresql</i> |
| <i>3. Uvicorn</i> | <i>6. Websocket</i>  |

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