**Low-Level Architecture and Data Models**

**P03:MunasibMall.pk**

**team member names & ids**

| **Student ID** | **Name** |
| --- | --- |
| **22100134** | **Abdur Rehman Masood** |
| **22100168** | **Daniyal Mumtaz** |
| **22100199** | **Waqar Ul Haq Khatana** |
| **21100161** | **Muhammad Muzammil Khan** |
| **21100034** | **Waliullah Aitemad** |

**Table of Contents**

[1.](#_gjdgxs) Introduction 3

[2.](#_30j0zll) System Architecture 4

[2.1 Architecture Diagram—](#_1fob9te)As it is in the prototype code 4

[2.2 Architecture Diagram—](#_3znysh7)As it should-be 4

[3.](#_2et92p0) Data Models 5

[4.](#_tyjcwt) Tools and Technologies 6

[5.](#_3dy6vkm) Who Did What? 7

[6.](#_1t3h5sf) Review checklist 7

# Introduction

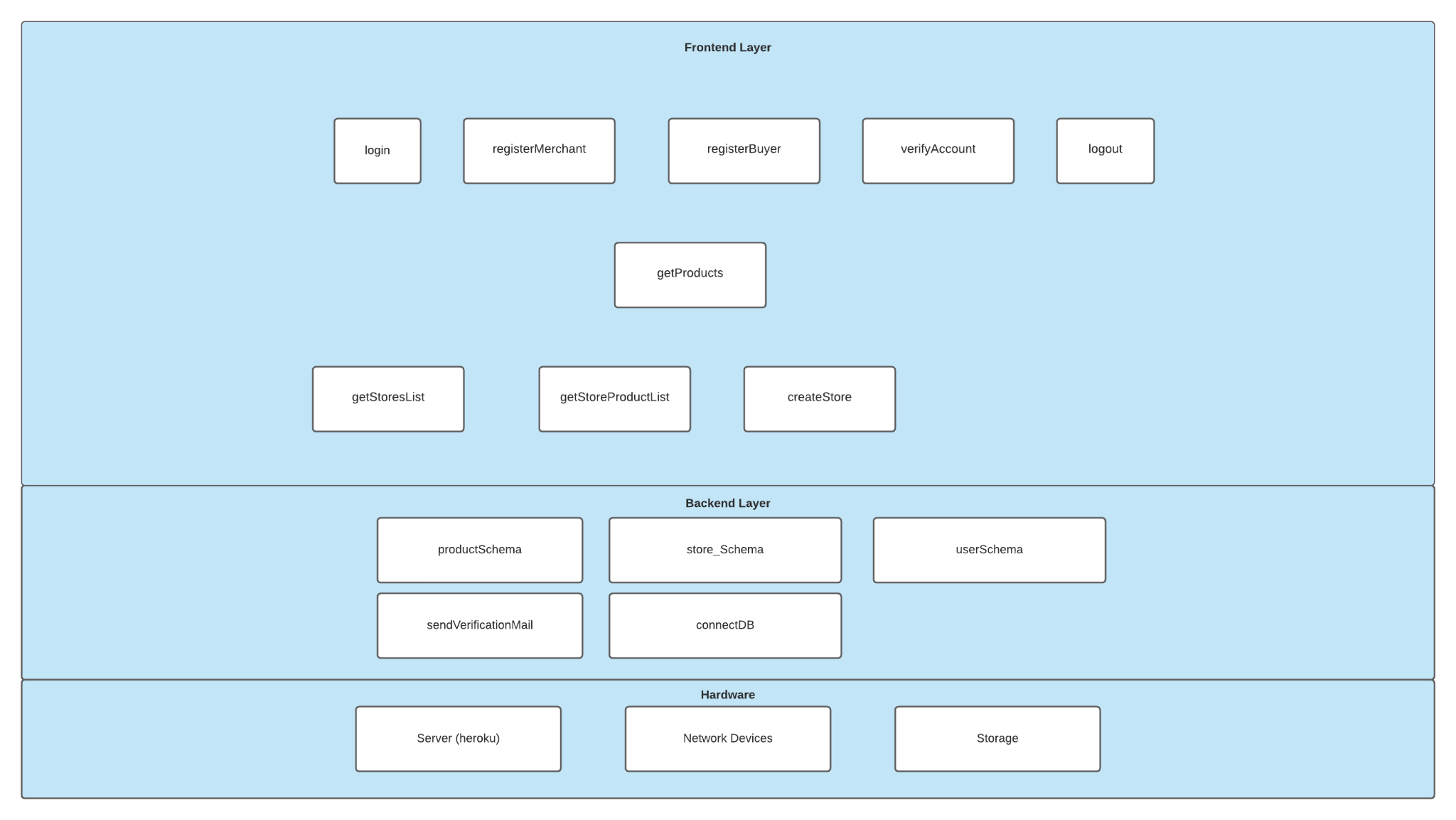
<Give an overview of the project here. The overview must highlight the overall objectives of the project and its potential users and customers.>

Munasib Mall is a mobile e-commerce application. It will allow different merchants to have multiple dynamic web stores and customers will be able to buy from them on this platform. Merchants will have complete control over their store(listing products, removing products) and will be able to customize their store according to their wants. They will also be given some customizability in designing their store page. Customers will be able to order products of all the merchants/stores. Customers will be able to look for specific products across various stores. Orders will be processed by the merchant who will also handle the delivery.

Payment options like easy paisa or COD will be shown to the customer who can choose their preferred method when purchasing. The system aims to provide a platform that gives more autonomy and the ability to handle orders to the merchants. Reviews and ratings will help the customer choose the right merchant.

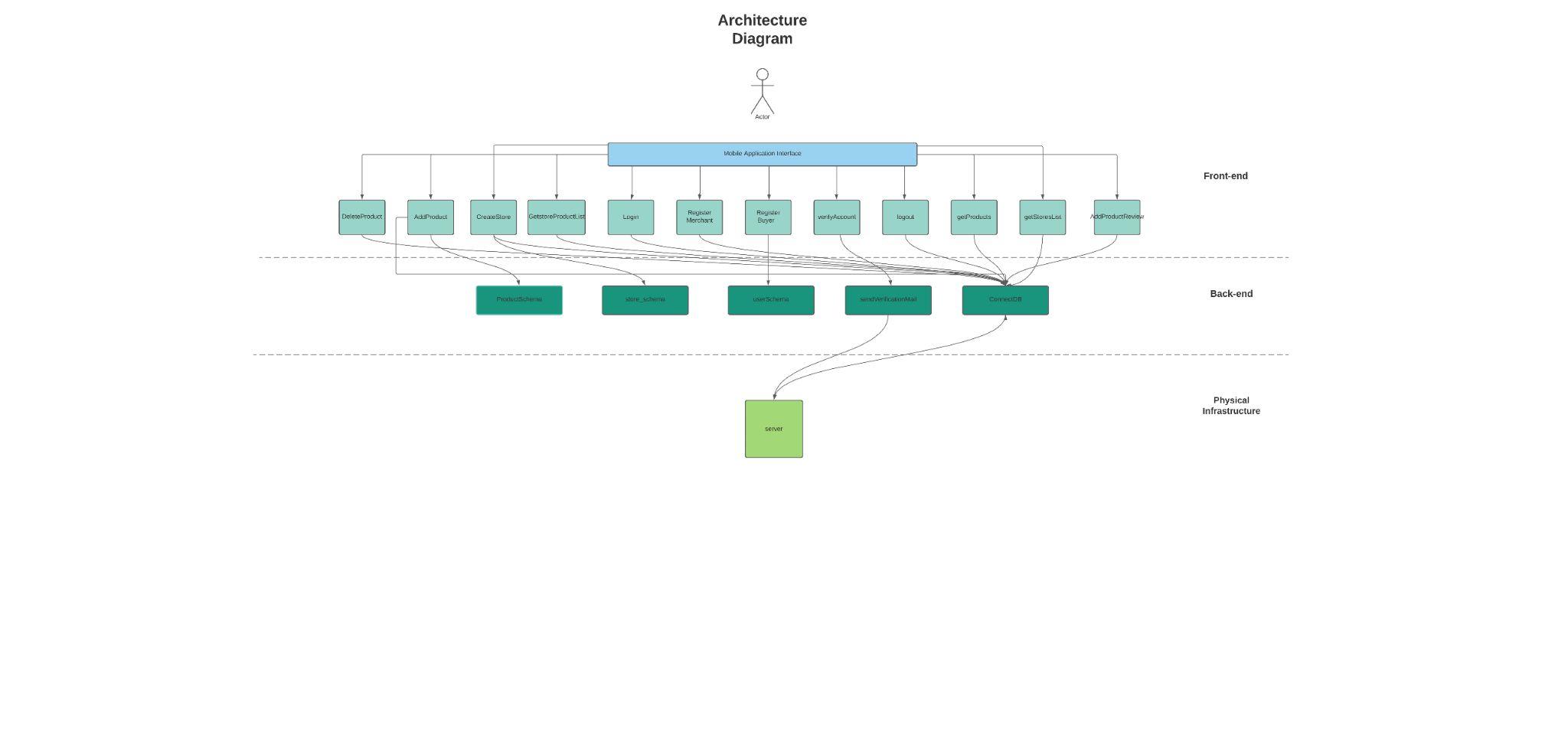
# System Architecture

## Architecture Diagram—As it is in the prototype code



## Architecture Diagram—As it should-be

Updated Architecture Diagram.



# Data Models

<Create data model of your system. For example, E/R diagram. Give brief description of entities and data fields.>

URL for the Data Model:

https://viewer.diagrams.net/?tags=%7B%7D&highlight=0000ff&edit=\_blank&layers=1&nav=1&title=er%20diagram.drawio#R7V1bd5u4Fv41fnQWd8OjYzedrtXMpE3mnM55maUY2aYF5ANyE%2FfXjwBhg7awsY18yaSrqzWyLGDvb983omeOotePCVrM74mPw56h%2Ba89c9wzDGMwsNh%2F2ciKj2iuUYzMksAvxvTNwGPwC%2FNBjY8uAx%2BntYmUkJAGi%2FrghMQxntDaGEoS8lKfNiVh%2FawLNMNg4HGCQjj638Cn82LUtbXN%2BG84mM3LM%2Bsa%2FyZC5WQ%2BkM6RT15qQ%2FiV3pGY8kt8wEmEYhxT9s09Sn7gpGd%2FmFOa3emwZ9yxv9Ns9s2MkFmI0SJIbyYkYsOTlE25m6IoCDM6Vxa65Qux05kfeuYoIYQWn6LXEQ4zZpVsKK7pruHbNR2SbN0WP3j6%2BXGVfvhi%2F%2Bf%2B69fb6Td9MX6O%2Bzpf5icKl5zAf6bF5TEC0VVJ9fQliEJ2Cz3zFp63XAMnFL9Whvh1fMQkwjRZsSn8W9Oyi59wEPbNkgEvG5bqunkz4PPmVY5afC7ibJqt19%2FcPfvACSAnxpcvxvxWn%2FU%2FD79b3v9%2FJ86vUb9vDgAxYhThnNmMGEkQz3qGE7LruH1mJHJm2SccoSDcPmWB0vSFJP6OWXMS49%2BX0TMjvzksZwl8YATO5s5pxM451tlHFAazmH2eMHZkv7zN2BAweRnyL6LA97Of3yY4DX6h53wpLTshCTjU7duePc7WWlKSFhKfLc2ugfzAIxIStu44Jjn7p0EYCkMQEdux1honfefGqCPFkuCkxE4VJE4HGJHfhAEwMkJJpiE%2BURwplptBqYRXpU7WJfSwJPToRGi%2B%2F896ffb%2Fnt79FnnTvzXnc6A9yQhCAxrukJpFEkz4lGlIEIUzmJGZJMGCBiTevtRzguJMtG7z%2F8HXE0TxjLAbNYej8iOYFES51SmlrpAHMKtJGl%2FmAcWPC5Td0fiF2d26hDZwuY3EGFvhIKDBtCU6VIYFTZlwmAALj3OyWOR80ya5nKg1LGYbAZESpQsBkRPFAkR5QKso9wbUEsMe3NS150BCDde4kRhZT5m6gNSImJNaiPhjg4gz25kbRTblj%2FyjxMQG%2FpAWU8ZMzOGMlCK6zBy3x6uzrAepDmu7ZTUEaJgSZJzUrtoAF5zVij1RUUZMV6YxTiwkkBi7DeYiIf5yQovYRHsojkpT9sbBbm8Hu8hjQ2IpZV6kqQztDmDwiESLEAXbrQJTYgnlMblhdiMCfVMDMiBzs5vCMUOZFEAiLdPSDhRRqigDEU4mc5SRYnhffoQe4ZrS1xhmHSQfznYEgDCrrYDYygQEhuJPCZr8kDGrW4vQtwaCW%2B3IhEEmCboySYDU2O0SrR2eLY5VkI5xGDDi4DyCIiTEKJbFYnxS3cV640Iz2I4TQWW2lBh1DpQLMLJRgUolxrPFoAuQYnDaMNSD1nWZUrb6VneyZly1rmKwnbRZ0%2BE0xHEgTgBRsqw2J4Ru1EUax%2F4wy%2BKzww9fIxT7f2xoJ%2FsiIcvYz7RLLtaMkMnqW3bAPA5%2B%2BNd6ZXYwfq3OHK%2F4UVuR5YxnFzPDbVKR2K8VGyAbW%2FMpwSGiTEnWcCJjHj%2FHA8ldvRInAkz6olOVkmUywfxHRiXJL6xjeYIr1xcVTkEbsBLjHVpVpnEFvOuCN0gsFtjgck3EI%2FLxUI6R7zNTkW7PCP65w0vMbWdaNZ5XFyW1FoU9VNXavW92Ar1T%2BoClDFTYP%2FSjIFZszlg8BJW0I%2FP3uggP5cCHOppjWlqcu2acrpncnj91lNrtvI0uolT5DcCc96bOoNbvMuuU0DVp6koVcuWRCqwn7y6hti71XBPyDwk5CixBhjdDXVrLUJa2MiSlDJ5nVA11UMqQKGlpwKV3YZ%2BkWIfpqSssfMY%2FGVeKWZ%2FWnw%2Bsjyb4Z4Cz%2Fp7hvgKsrIJqNJRB1t1PLUGkTqQginojozfU4L%2BPjDcw69KxoGlCvOpJKCRrMHCVWZQDDEq1FGLfrkshEsg2hgKNSWM%2BeZOuv7rY4SA5asggb5EjGUqUZb8MWDGrqLMT2yZbUkz1ZG5YF0keqdBAO10LnJvSwSklkx%2FFlE8MpLPrijUOwvWelUNZmleWF1JmL1wHsCRLYj3yQ06QetaNJHROZiRG4WdCFpy23zGlK57ky8gupPleA%2Fqt8jlL0vGcHTvaZOmygzJJV8sB8gvJx%2B6C7B55Ws8XZrCRyveN8lgkwLYQxjR67VJ6R2bqPK9uIfsDgdUNCbYDkmJb77Mi20EKMJHMSfScVX%2FauVbH5bgdgSK6rM1Ikc8gpxGMyefovETyhJZnT2IyT0sjaDEnJKbMpbksQsnKr6clFPTQizDnnFQauHWZk4XDp6USLFFHKGZR43np1LeEyoqsAndaQsHc7pRAP%2BucCtwdnJtGsPBzEbrJBtVcDfqDJ6VUGWRdGqVESNnn1uIWzCOw%2BH1yZvUkkqltG646MkHvMsETzNzlM%2BtxU3z0RZKYOi2loI%2FJE7FKsw26LsQfUkfytN1pUAfxFF27gs%2B%2FowfTaqjtlADXW3Tkn7baM4AuHWBSGPAwPyNf%2BTyunmcgKKIVDvgona8TEiF6xuEDo3%2BBgHFS3M2awSGe0m3sTZmqYZB5ypMZ2mbgc%2F67sSPl%2BIIkdERidqlF7%2B8Yo5S%2B4JR2pKEsQUNJi7HSFiJF%2FHOhXL7zr5l%2FhtD32%2Fegb%2BeYEgYqa4BxYYgOGAgTahWF2dR816u03lU68Vo335XP%2Fe9qsyudrn3a7OwtFD4yddc3xDZ3MXfXts1ObOsEC3XUZaeb8vN01XYn1%2FvQBwSwa9chWk0C724OleSKq0c8I73JQv9V%2BUaekW5E7s5s8npDiEtpEO0bjldXT6LdaIvdbCWxSfRo%2BHad5XY761LuEoONeLoYmHjiM4ltUXFoWWNfjSaeRz%2BBQnNhOukYO9qmztUJUpSaQsHb0Q8FDlxJDEjOrky8Fo7wMcqEDT6RexSvzmnSLkYFMUDoNUCY4tYK%2B0BLfHL34iyVp9hbegfXVhf%2BCHAZVufgaj5V%2FaKNE1g9DzYBqbZ6lce7HN2sR5maZe2IM%2FOjB5wE7M6z9N5VGFJLE1UUSLS2Dio95pezf9Z%2FnDo6TfPG1itfu0rAml%2BF1DVQi9YWuY53NdqVGoVMNsVCSesnDoWOYVOE%2F%2FkttKTF%2BjBoNT7xKm27UxITnBgWttixu5cyqy1lXZ7r1iIuVAGMuoYRYfJ9GS3Kp9CvAjWiBnDEhPjhmHFE764jIyde8qDjNIT8qc5Lt3CO5lRt3I1W%2BHCNdu7Qp%2FmzRVr7ebtTtVy9737o370wwQG5sCOSd6LPJj7v2lX6zhXOU98HYPd85wSC9m7v2wLQFUNg81B7D5c6a6pGiosW%2FQzvNYU2rLXFFO%2FhKLGOtvBdo0Rx5ek9EN0OiIH4UFx7bAm%2B4znrEFJkSRrlALT2yMh1wl2FqbGMt1a9FLDZouIQzQEWE6HS3aNXcv7BHuJ31aBQNdTl2T00rIQ6xjvaO%2B4cWt0m6y9dNcAuZttbi%2Fe%2B%2FNU1Y%2FdiqlXDhcQc1%2BZbiokYr7vc0Wbv%2F8uRcoWNKDluVlfYiiLZ28dc83JfGLjwnQdwMcW6QLJv3VvW5a4uSt7BLrwrKHLRWVTNuBb%2B3Vti3A5qt64A2uflmvGuVAFP4JuiLOtQneqAl%2BrAtVTz%2BEzu1Ruv1LlHtaoIQn%2BaSp3b8RMQcri1yAG%2BIUNg22Dv32P0hWXJljutwjBb%2BGDvqZrOujKtMjV2bBkpe4pSrCOJVdGzh3GS7YU68zjeOyubH6h1biz3CFh5jrb5U2%2FINTTvxqv%2BGSgxZkBOdGd9T0oNmmSbkJ7hoCjbqCF%2BThc5HLTOhtJ8p1K%2B1WC%2BaSncCLajU4lvhBLE8II3EThulyxdKKO2fPenuo2%2FoU6khCK2xrBhn%2BPsdaD5O3OL%2FVS3vET3gpm4YyeIHbu%2FGKKX5JydjdDz9YN0wuwVzfkE5LGBuUH6gAL%2Bwuv1a6X%2BLWwV8iGWwk1D2eHmDfKFtUjQYn5PfJzN%2BAc%3D

# Tools and Technologies

<List down tools and technologies that you are using for development and deployment. Make sure that you mention name and version of the tools.>

1. MongoDB 5.0.

MongoDB is a cross platform, no-SQL database program. MongoDB is easily scalable and supports all functions of modern database systems.

1. React Native 0.64

React Native is a React.js powered , JavaScript based mobile app framework which allows cross platform development.

1. Express(.js) 4.17.1

Express.js is a back-end web application framework for Node.js.

1. Node.js 16.7.0

Node.js is a back-end JavaScript runtime environment that executes JavaScript code outside a web browser.

1. Heroku

Application Backend will be deployed in Heroku which is a cloud Platform as a service(PAAS).

6. Android Studio

To create APK files that can be run on android to test/check the app.

# Who Did What?

| **Name of the Team Member** | **Tasks done** |
| --- | --- |
| Abdur Rehman Masood | Tools, Data Model |
| Daniyal Mumtaz | Tools, Introduction, Architecture Diagram 1 |
| Muzammil Khan | Architecture Diagram 2 |
| Walliullah Aitemad | Architecture Diagram 2 |
| Waqar ul Haq Khatana | Architecture Diagram 1 |

# Review checklist

Before submission of this deliverable, the team must perform an internal review. Each team member will review one or more sections of the deliverable.

| **Section** **Title** | **Reviewer Name(s)** |
| --- | --- |
| Data Model | Abdur Rehman Masood |
| Tools, Intro, Architecture Diagram | Daniyal Mumtaz |
| Architecture Diagram | Muzammil Khan |
| Architecture Diagram | Walliullah Aitemad |
| Architecture Diagram | Waqar ul Haq Khatana |