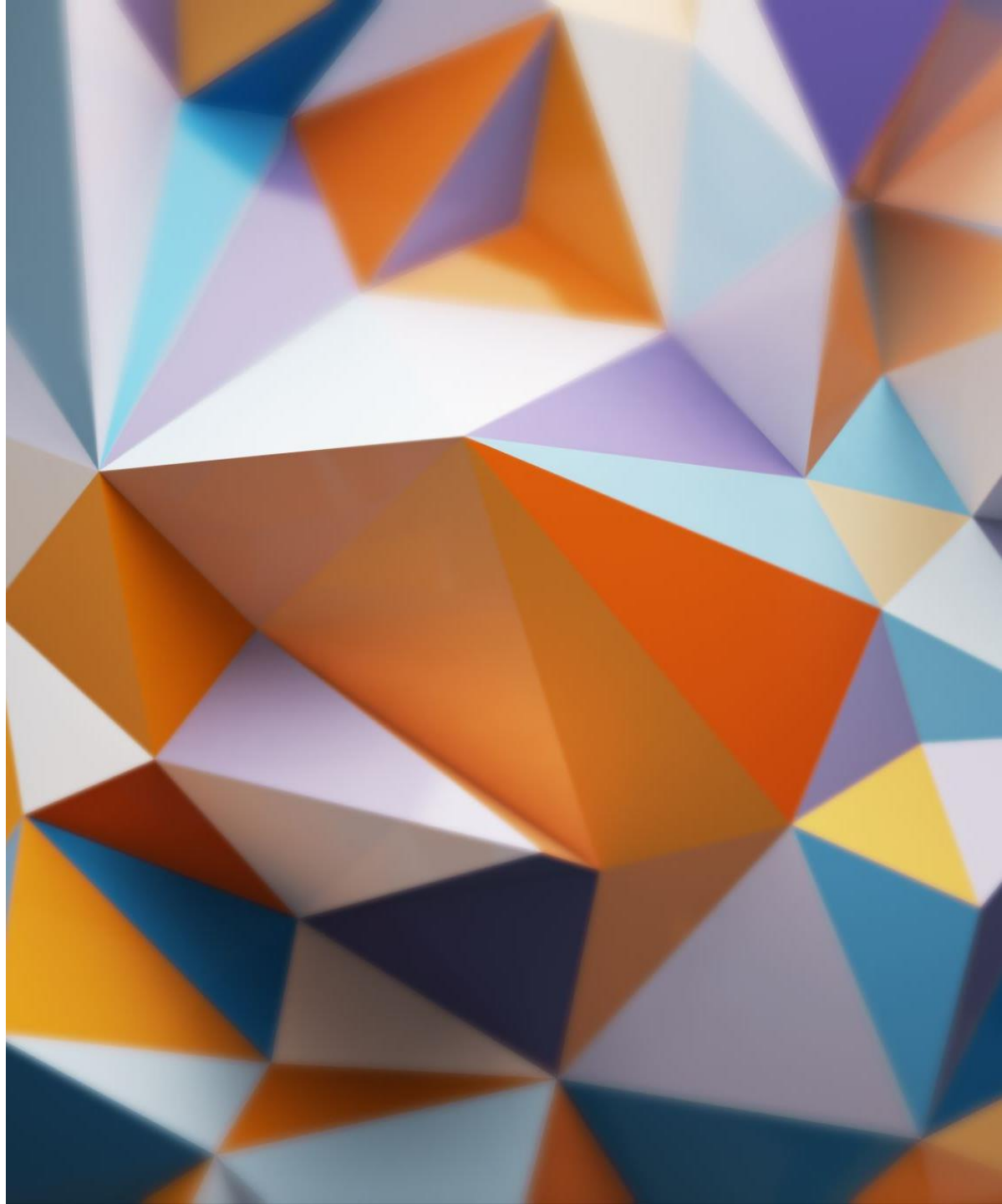
ONLINE BLOOD BANK APPLICATION

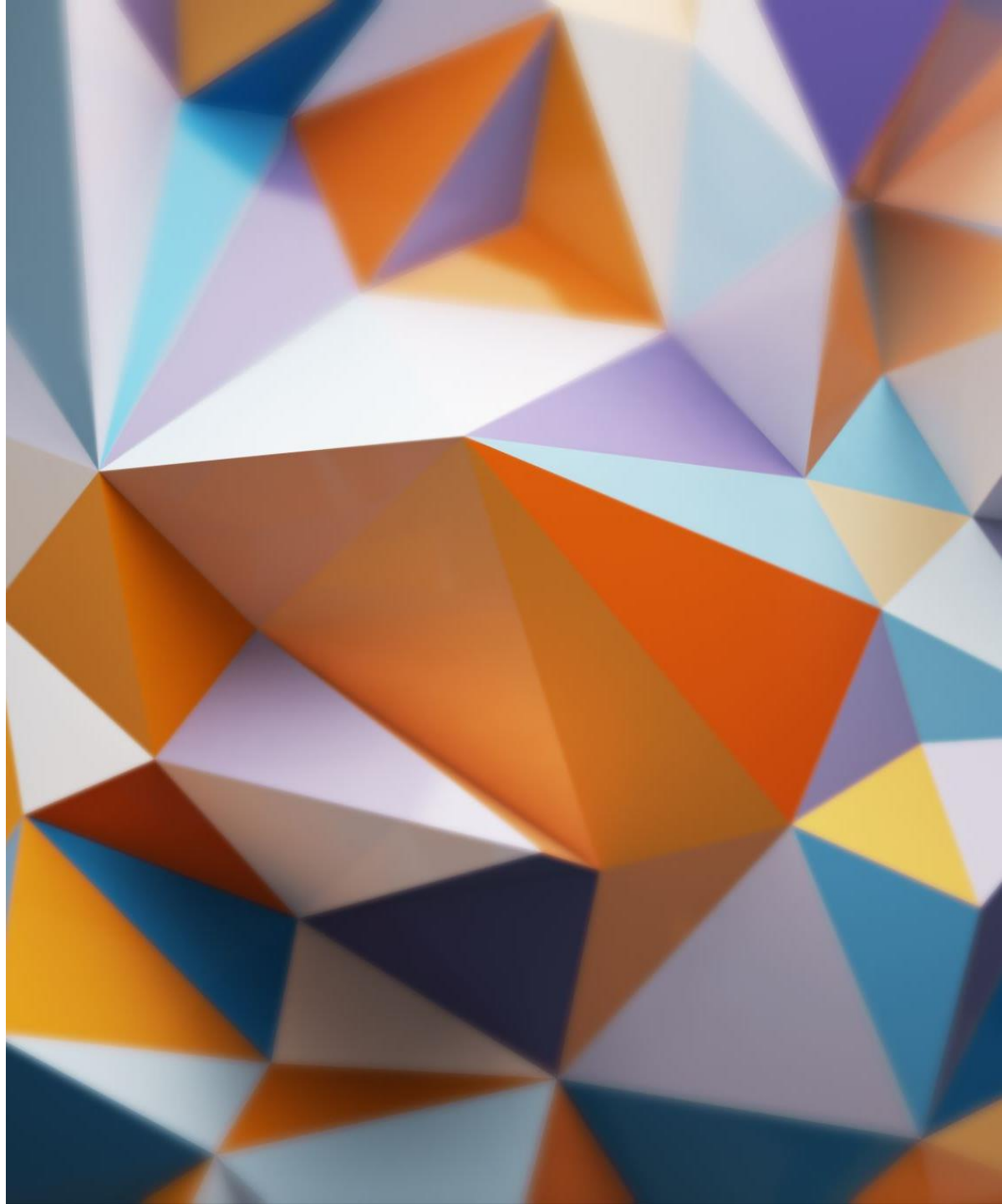
USING ANGULAR, SPRINGBOOT AND MYSQL

Presentation by FS_Team_162



INTRODUCTION

Presentation by FS_Team_162



INTRODUCTION

- Web based blood banks application
- Makes blood samples and donor samples readily available.
- Features include adding donors, adding blood samples, removing old blood samples and many more.
- Uses Angular framework for frontend, Springboot for backend and MySQL for database management.

BACKEND DEVELOPMENT

USING SPRINGBOOT AND MYSQL

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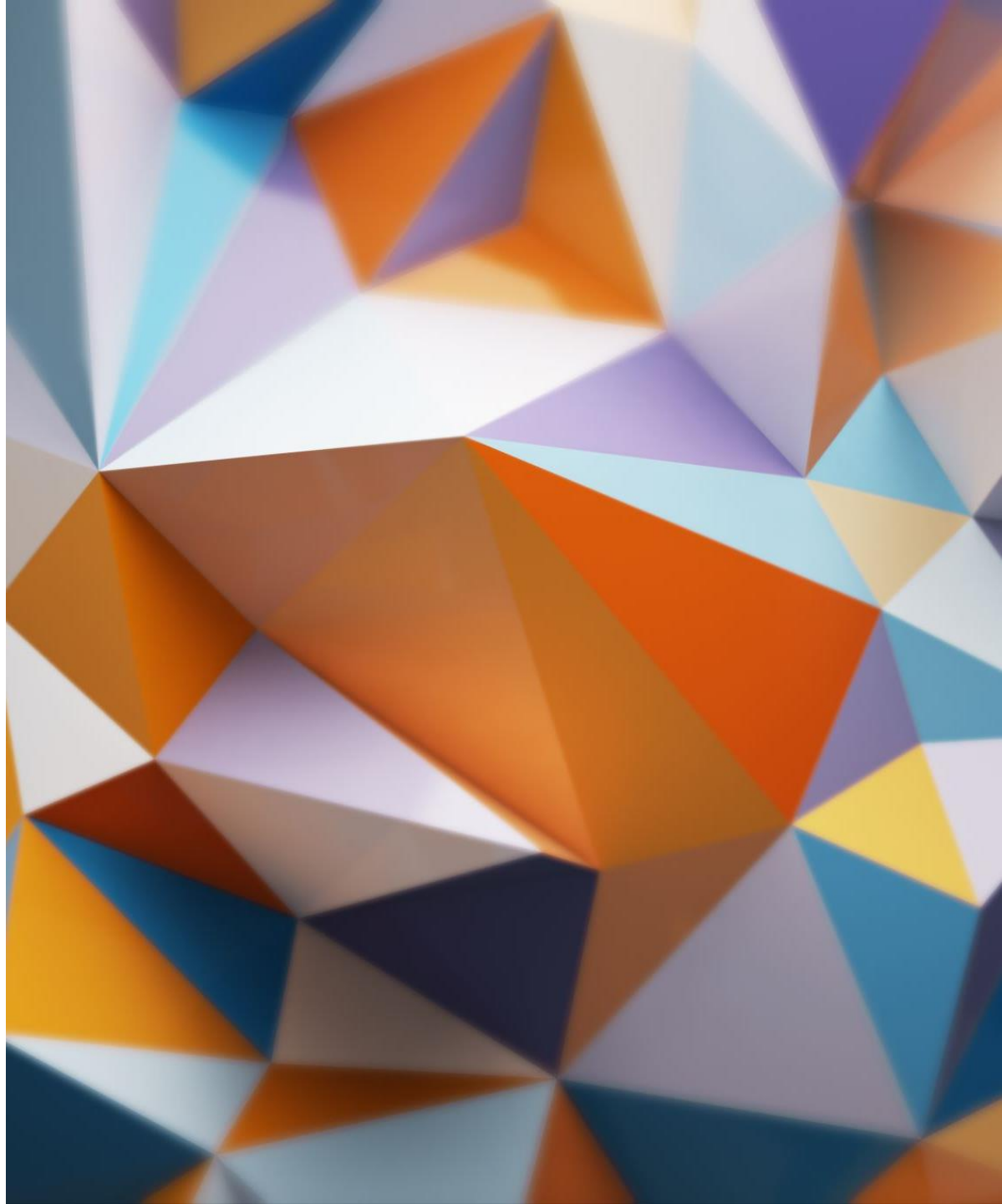


MODELS

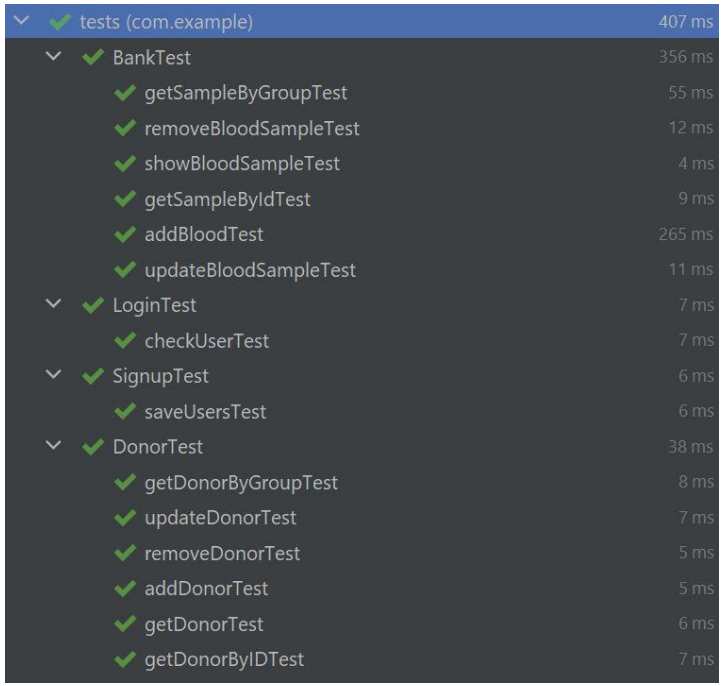
- User Model which includes First name, Last name, email, password, mobile number
- Login Model which includes email and password
- Donor Model which includes donor id, donor name, age, weight, blood group, blood pressure, ph level , mobile number, location.
- Blood Bank Model which includes blood group, blood pressure, ph level, data of submission, quantity of sample.

CONTROLLERS

- Signup Controller: Which handles /signup api endpoint
- Login Controller: Which handles /login, /UserDetails/{id} and /logout endpoints
- Donor Controller: Which handles various donor related tasks like viewing list of available donors, adding donors, updating donors, removing donors.
- Blood Bank Controller: Which handles various blood sample related tasks like viewing list of samples, adding samples, removing 90 days or older samples.

TESTING THE BACKEND DEVELOPMENT

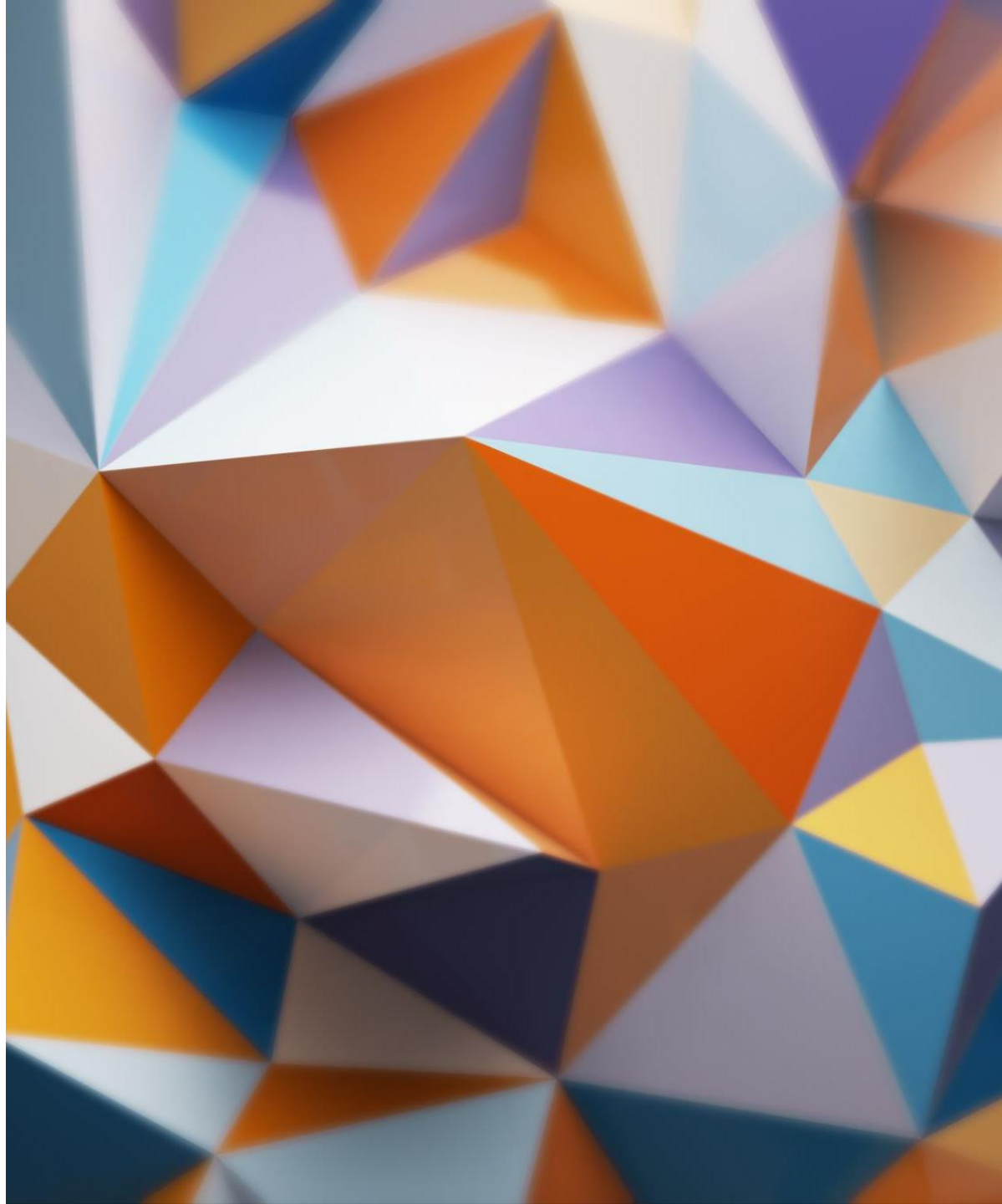
- We have used Junit and Mockito dependencies for testing the spring boot application:



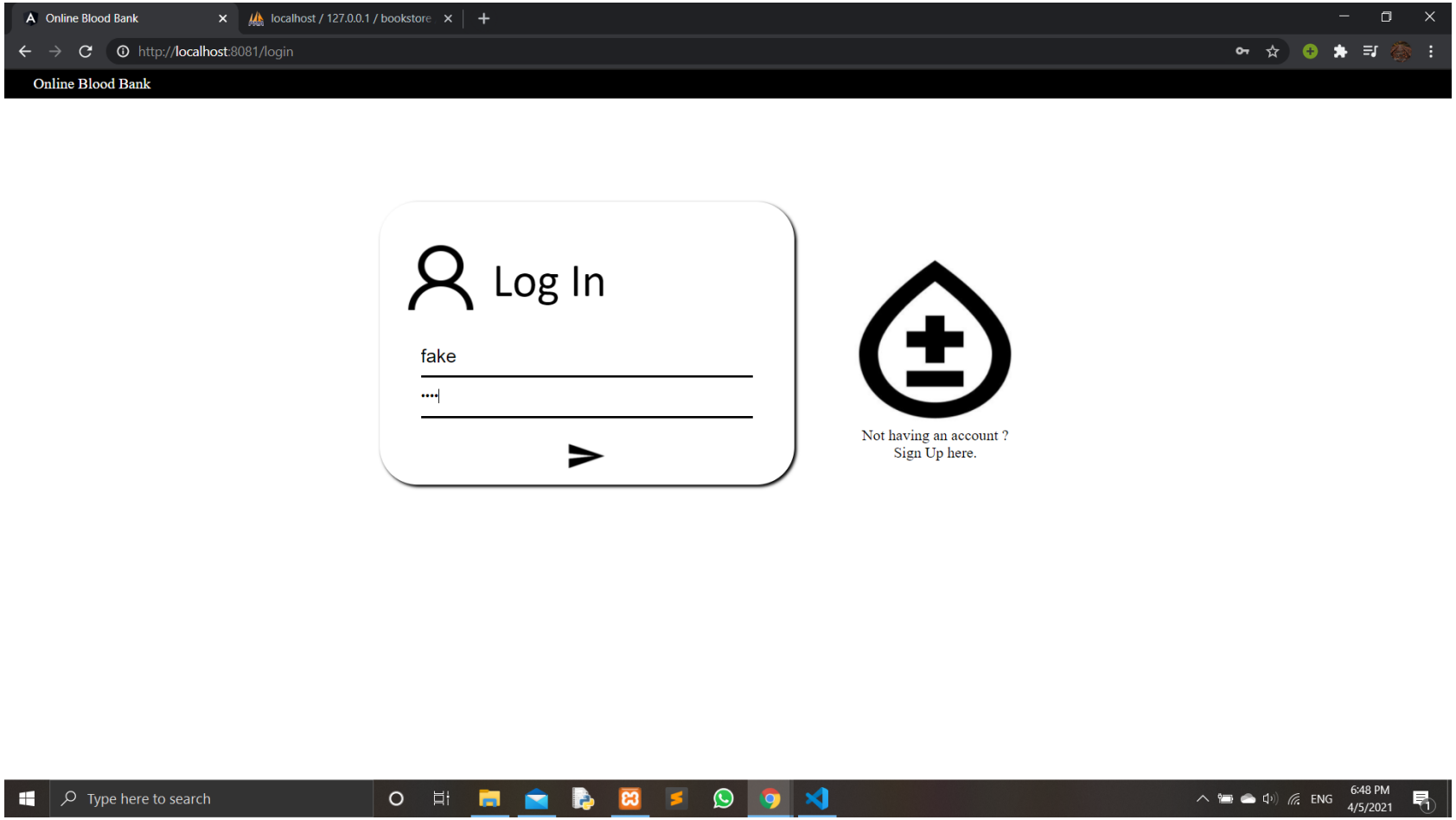
FRONTEND DEVELOPMENT

USING ANGULAR

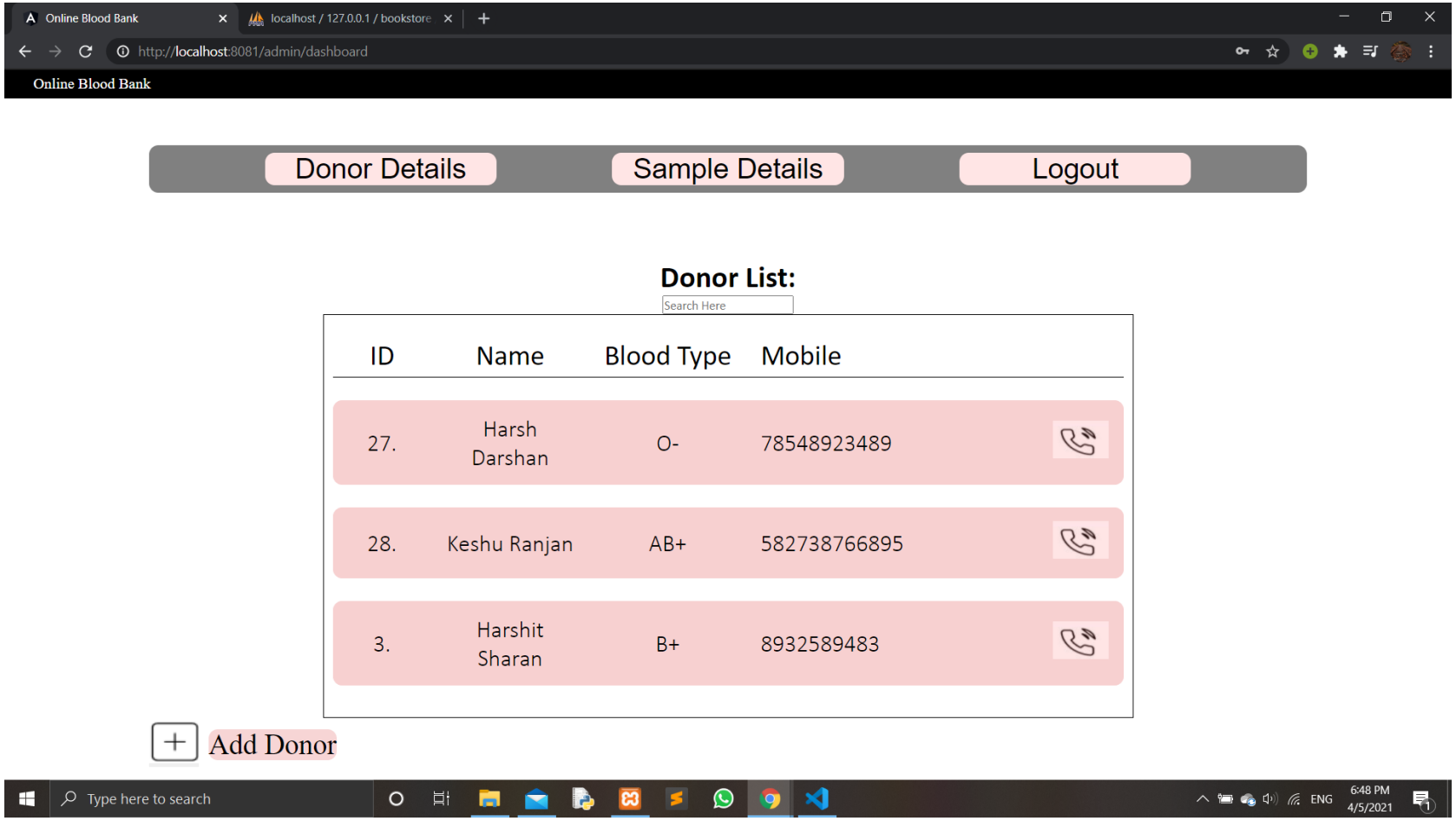
Presentation by FS_Team_162



ADMIN PAGES


Online Blood Bank
localhost / 127.0.0.1 / bookstore
http://localhost:8081/login
Online Blood Bank
Log In
fake
Not having an account ?
Sign Up here.
Type here to search
ENG
6:48 PM
4/5/2021

ADMIN PAGES


Online Blood Bank
localhost / 127.0.0.1 / bookstore
http://localhost:8081/admin/dashboard
Online Blood Bank
Donor Details
Sample Details
Logout
Donor List:
Search Here
ID
Name
Blood Type
Mobile
27.
Harsh Darshan
O-
78548923489
28.
Keshu Ranjan
AB+
582738766895
3.
Harshit Sharan
B+
8932589483
Add Donor
Type here to search
ENG
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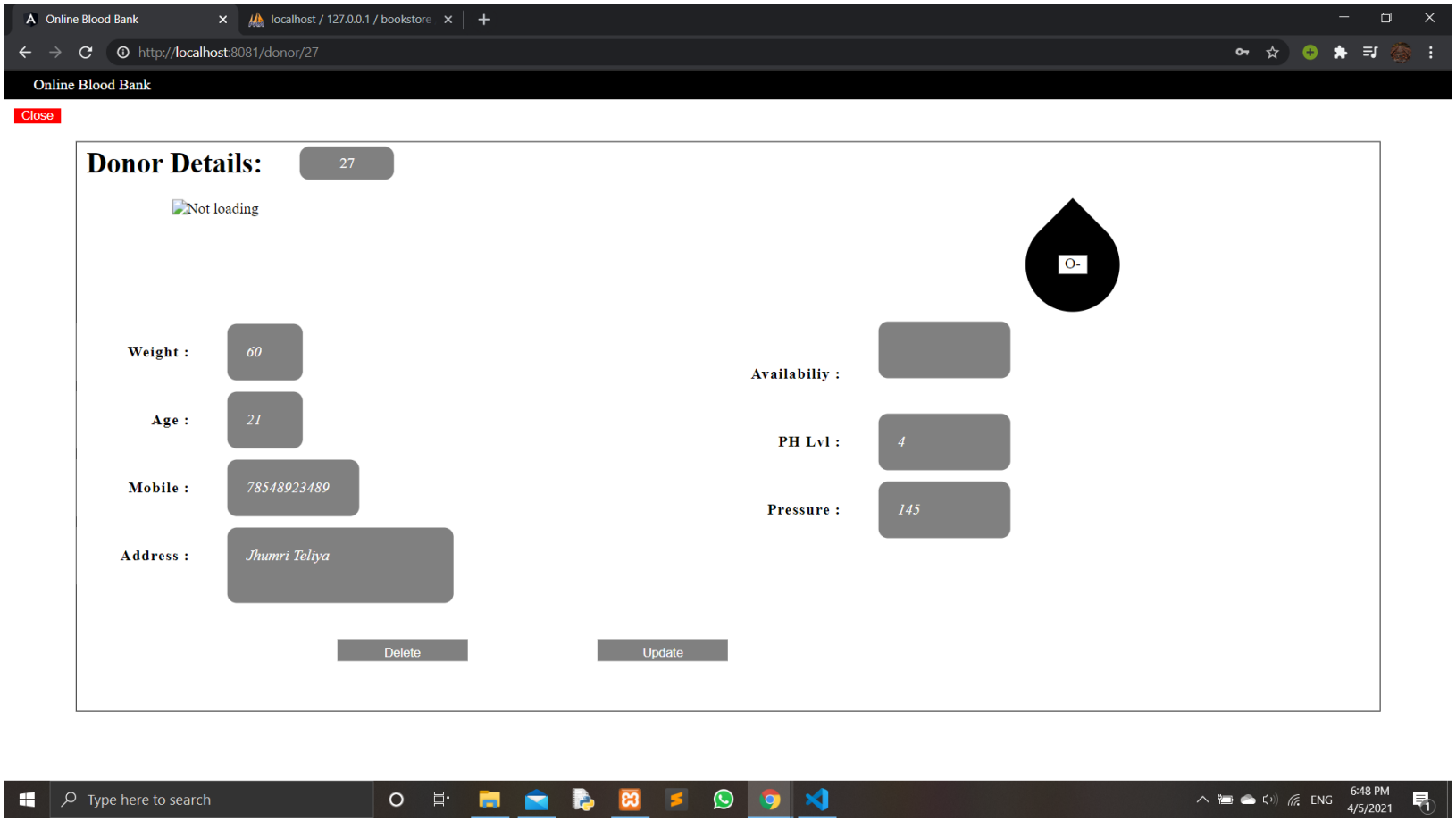
ADMIN PAGES


Online Blood Bank
localhost / 127.0.0.1 / bookstore
http://localhost:8081/donor/27
Online Blood Bank
Close
Donor Details:
27
Not loading
O-
Weight :
60
Age :
21
Mobile :
78548923489
Address :
Jhumri Teliya
Availabiliy :
PH Lvl :
4
Pressure :
145
Delete
Update
Type here to search
ENG
6:48 PM
4/5/2021

USER PAGES


Online Blood Bank
http://localhost:8081/user/dashboard
Online Blood Bank
Donor Details
Sample Details
Logout
Sample List:
Search group here
ID
Sample Group
No. of Packs
Location
12.
b+
32pcs
Ranchi, Jharkhand
2.
O-
45pcs
Bokaro, Jharkhand
Type here to search
ENG
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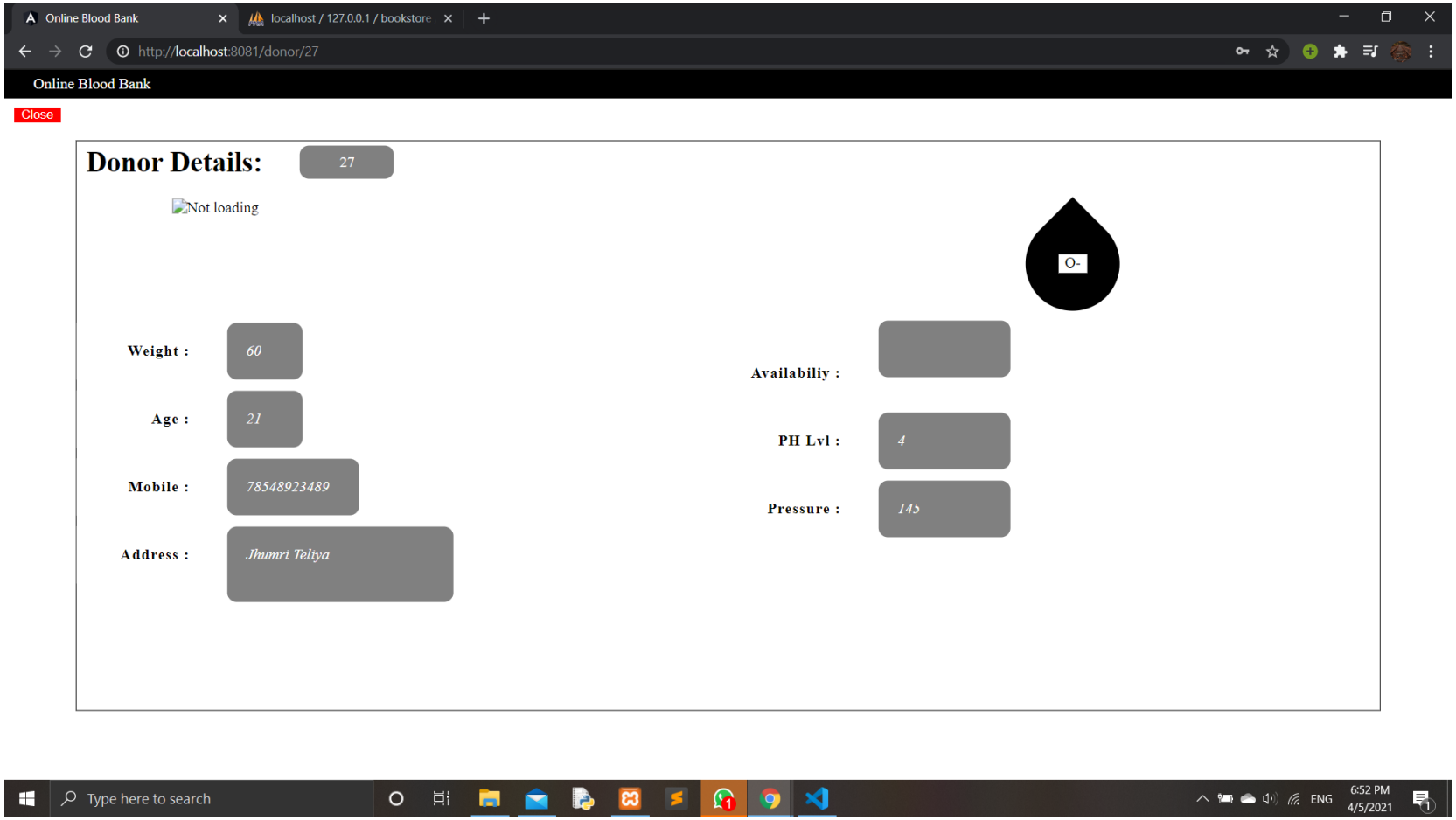
USER PAGES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Weight :
60
Age :
21
Mobile :
78548923489
Address :
Jhumri Teliya
Availabiliy :
PH Lvl :
4
Pressure :
145
Type here to search
ENG
6:52 PM
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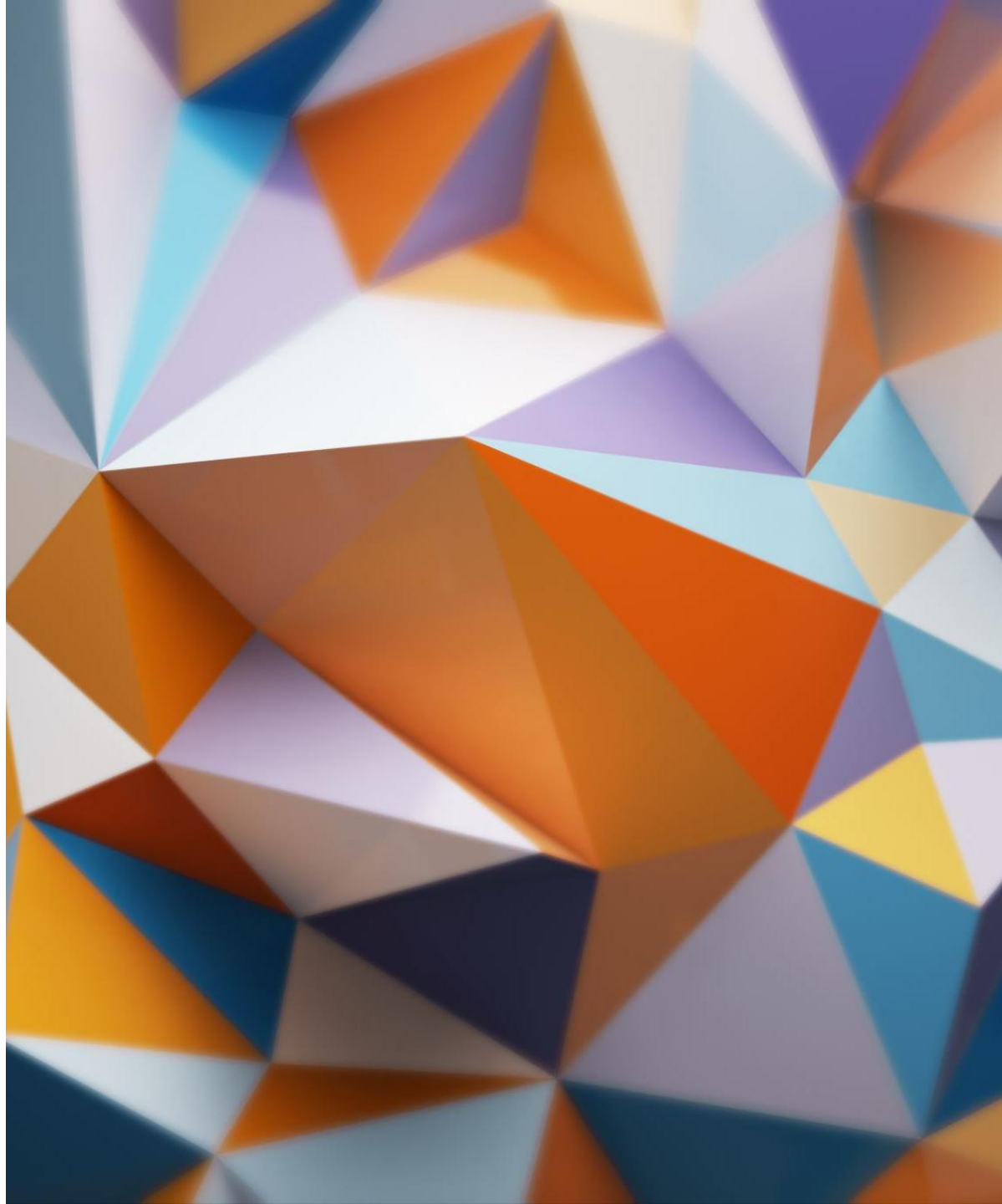
API ENDPOINTS

USING ANGULAR, SPRINGBOOT AND MYSQL

Presentation by FS_Team_162



LIST OF API ENDPOINTS USED:

- /signup
- /login
- /logout
- /UserDetails/{id}
- /donor
- /donor/{group}
- /donor/{id}
- /admin/donor/{id}
- /admin/donor/{id}
- /admin/addDonor
- /sample
- /sample/{group}
- /admin/sample/{id}
- /admin/sample/{id}
- /admin/addSample

LIST OF API ENDPOINTS USED:

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- /login
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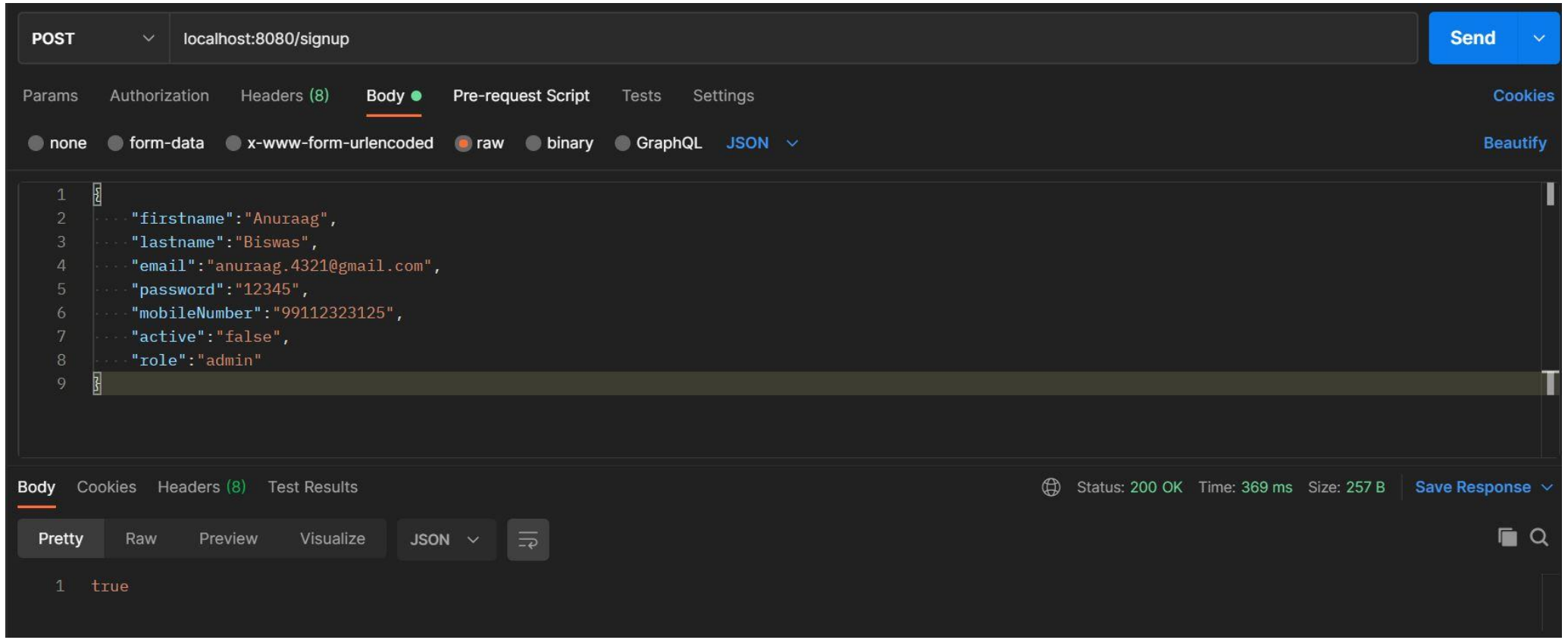
- /donor/{id}
- /admin/donor/{id}
- /admin/donor/{id}
- /admin/addDonor
- /sample
- /sample/{group}
- /admin/sample/{id}
- /admin/sample/{id}
- /admin/addSample

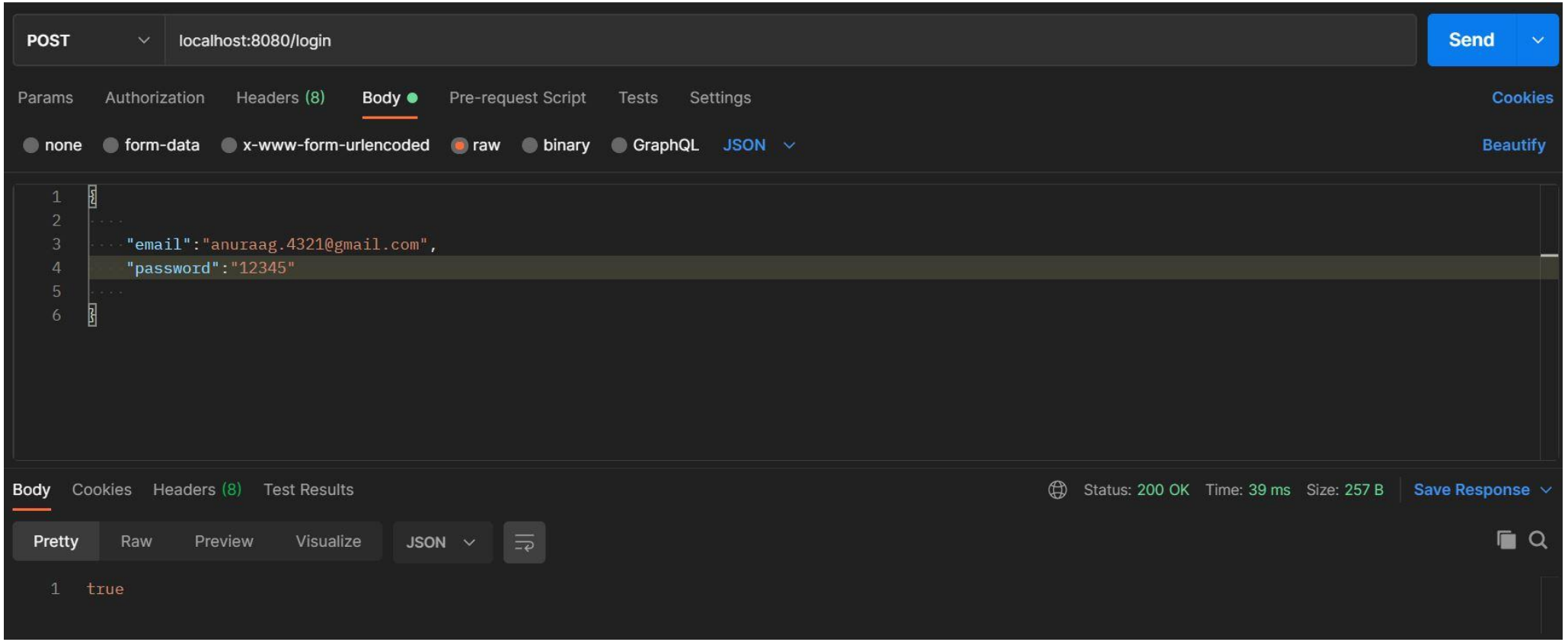
TESTING API ENDPOINTS

- Figure showing testing of /signup endpoint using Postman.

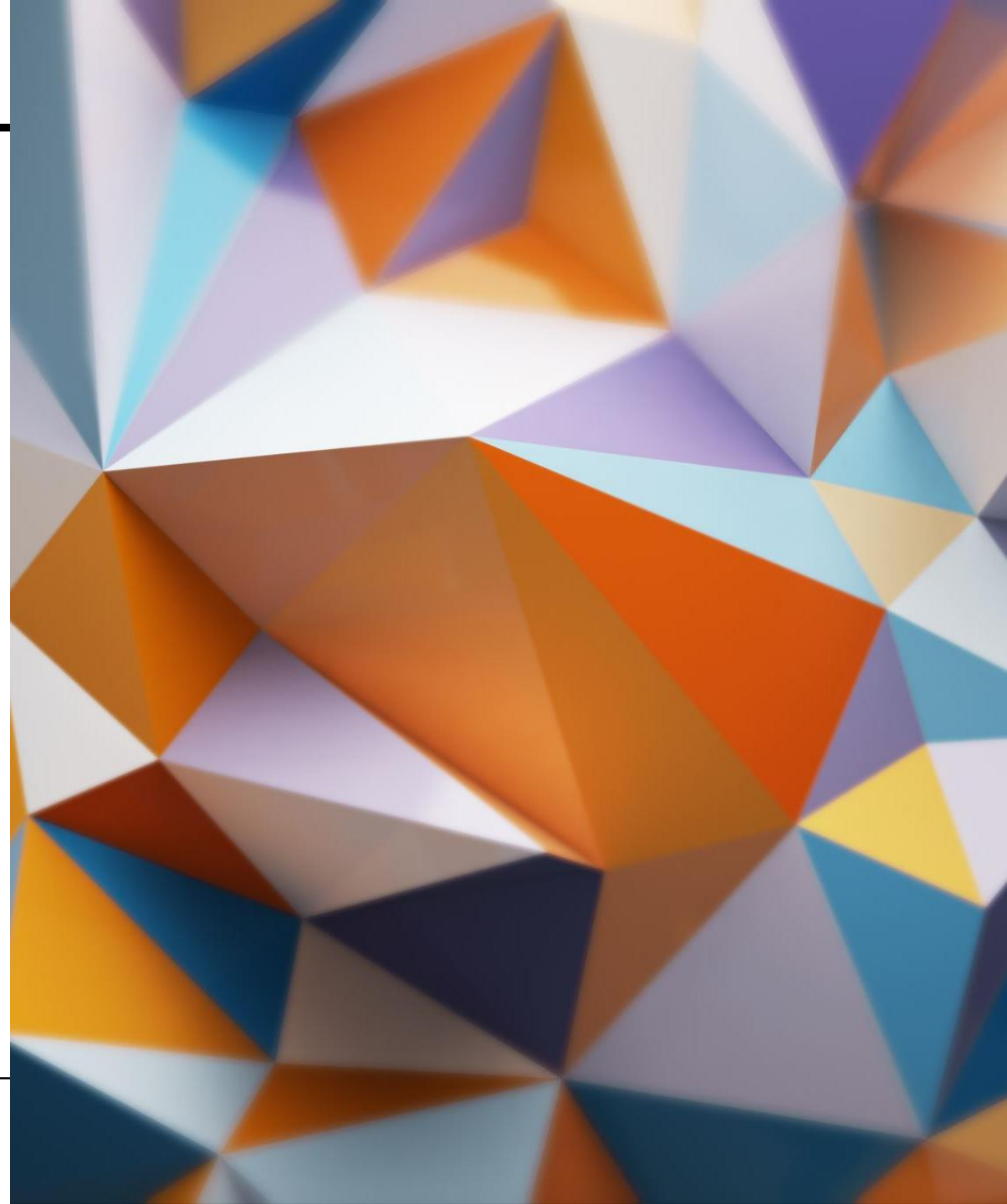


TESTING API ENDPOINTS

- Figure showing testing of /login endpoint using Postman.



NON FUNCTIONAL REQUIREMENTS



PERFORMANCE, SECURITY AND SCALABILITY

- For enhanced security, we have used the spring boot security dependency. No passwords are stored in plaintext. Passwords are encrypted using the a hash function and salts. We have used Bcrypt encoder for this purpose.

- For scalability, araciality and fail over, we have included a docker file. This docker file can be used with Kubernetes and Google Cloud for auto scaling and better araciality for our app.

THANK YOU

PROJECT CONTRIBUTORS:

1) ANURAAG BISWAS
2) HARSHIT SHARAN
3) SOURADIP MANNA