



# TEAM PHANTOMS'

P R E S E N T S   T H E   W E B & A P P



# छात्रah

BY SHIVAM ANANYA ARNAV

# ACKNOWLEDGEMENT

I would like to express my special thanks of gratitude to my teacher Navaid Rizvi sir as well as Anushka Shrivastava di who gave me the golden opportunity to do this wonderful project on the topic web-app development , which also helped me in doing a lot of Research and i came to know about so many new things I am really thankful to them. Secondly i would also like to thank my parents and friends who helped me a lot in finalizing this project within the limited time frame

I am are over helmed in all humbleness and gratefulness to acknowledge my depth to all those who have helped me to put these ideas, well above the level of simplicity and into something concrete. I would like to express my special thanks of gratitude to my teacher as well as our principal who gave me the golden opportunity to do this wonderful project on the topic which also helped me in doing a lot of Research and came to know about so many new things. am really thankful to them.

Any attempt at any level can't be satisfactorily completed without the support and guidance of my parents and friends. would like to thank my parents who helped me a lot in gathering different information, collecting data and guiding me from time to time in making this project, despite of their busy schedules they gave me different ideas in making this project unique.

Thanking you,  
Team Phantoms'

# PROJECT DOCUMENTATION OF TEAM PHANTOMS'

## PROBLEM STATEMENT

Here in this project we have tried to solve major issues of the students staying in the hostel, as it gets very difficult for students to raise the complainant of their respective issues and it also creates many problems to Wardens and caretakers to maintain offline records of each issues.

Keeping this in mind we have developed an app which is our main project and also an website through which a student can raise a problem online from theirs hostels only and wardens can keep a record of the issues online too.

## REQUIREMENTS

- Device
- Knowledge on front-end and back-end
- How to operate database
- How to manipulate database
- How to connect database
- Learning Android studio
- learning framework
- Learning kotlin
- Team work
- Languages like HTML CSS Golang Kotlin



## TECHNOLOGY USED

For front end development in app we have used XML

For front end development of website we have used HTML and CSS

For back-end

The backend is written in Go, a high level programming language with Gin, a high performance HTTP web framework based upon REST api.

### Backend Workings

There are two types of APIs in this backend:

- Public APIs which are used in login system.
- Private APIs which can be accessed only when a user/admin (warden) logs in and itself is also of two types.

#### Available Public APIs:

- /login: Used for logging in for normal users. For admins use /admin/login.

Returns {"token":<value>} when login is successful. Provide json data as {"roll\_no":, "password"=} for regular users and {"username":<value>, "password"=<value>} for admin users.

- /logout: Used for logging out for normal users. For admins use /admin/logout. Removes the generated token from the server and returns StatusOK when successful. Provide json data as {"roll\_no":<value>, "token"=<value>} for regular users and {"username":<value>, "token"=<value>} for admin users.

- /signin: Used for signing in only for regular users. Returns StatusOK when successful. Provide json data as {"roll\_no":<value>, "password":<value>, "name":<value>, "hostel\_code":<value>},.

#### Available Private APIs

These can be accessed only when the authentication is successful through token which the client gets after logging in. Specific APIs are made for both students as well as admins.

## TECHNOLOGY USED

For regular users:

For authentication, the client must provide json data as: {"roll\_no":<value>, "token"=<value>} while accessing these:

- /private/user: Used to gather information of the logged in user. Returns data as {"roll\_no":<value>, "name":<value>, "hostel\_code":<value>},.
- /private/user/complaint: Used to send your complaint to the server. Returns StatusOK when successful. Provide json data as {"roll\_no":<value>, "complaint\_text":<value>, "complaint\_text\_title":<value>, "hostel\_code":<value>},.
- /private/complaints: Used to gather all of complaints submitted by the logged in user. Returns json data as {"roll\_no":<value>, "complaint\_text":<value>, "complaint\_text\_title":<value>, "hostel\_code":<value>},.
- /private/complaint/:uid/resolve: Used to resolve a specific complaint query identified with its unique id. Returns StatusOK when successful. Provide uid as /private/complaint/<value>/resolve

For admin users:

For authentication, the client must provide json data as: {"username":<value>, "token"=<value>} while accessing these:

- /admin/admin\_user: Used to gather information of the logged in user. Returns data as {"username":<value>, "name":<value>, "hostel\_code":<value>},.
- /admin/users/:hostel\_code: Used to gather information of all logged in students of the hostel the warden is of. Returns data as {"roll\_no":<value>, "name":<value>, "hostel\_code":<value>},. Provide hostel\_code as /admin/users/<value>
- /admin/complaints/:hostel\_code: Used to gather complaints of all logged in students of the hostel the warden is of. Returns data as {"roll\_no":<value>, "complaint\_text":<value>, "complaint\_text\_title":<value>, "hostel\_code":<value>},. Provide hostel\_code as /admin/users/<value>
- /admin/complaint/:uid/resolve: Used to resolve a specific complaint query identified with its unique id. Returns StatusOK when successful. Provide uid as /admin/complaint/<value>/resolve




## PROJECT DESCRIPTION

Here in this project we have tried to solve major issues of the students staying in the hostel, as it gets very difficult for students to raise the complainant of their respective issues and it also creates many problems to Wardens and caretakers to maintain offline records of each issues.

Keeping this in mind we have developed an app which is our main project and also an website through which a student can raise a problem online from theirs hostels only and wardens can keep a record of the issues online too.

- There is login portal for admins
- All the wardens are considered as Admins , they can make changes according (example if the complaints are resolve she can change the status of complaints from pending to done)
- For students we have login and registration portal after login or signup Students can raise their complaints in app which will be delivered to respective hostel warden .


## CHALLENGE FACED

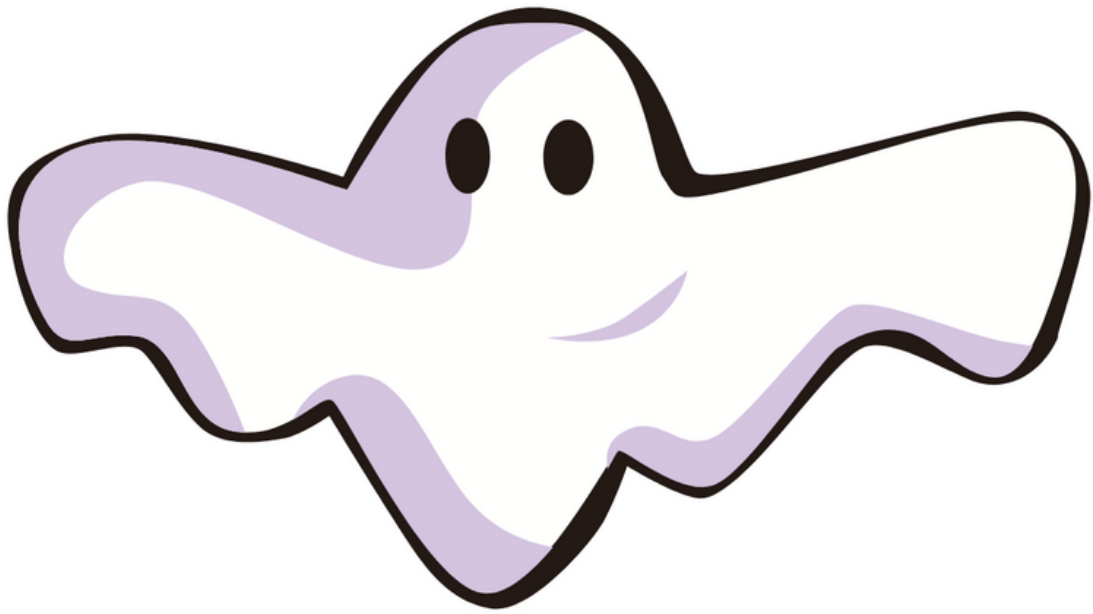
- Errors! Errors! And Errors! Lots of errors were encountered while connecting the front end to the backend.
  - learning kotlin and may new terminologies
  - Learning a new program languages and understanding the Algorithm in a finite set of steps required to accomplish
  - Bugs
  - Designing the UI
  - Internet issues
  - Constant pressure
- 

## **SCOPE**

This project will be beneficial for students as well as staff as it will not only solve the problem just in single click but also will save time, therefore the usage of the app will be exponentially increasing in future.

## **CONCLUSION**

- Our aim in this project was to create an educational and time saviour application that would not only help students to raise complaints but also will save their time and make the work easy .
  - We accomplished this project by compiling a list of common HTML CSS XML Kotlin etc programming files made by us.
  - We believe that our resulting project will prove to be very useful tool for future students.
- 



**THE PHANTOMS'**

A n a n y a   S h i v a m   A r n a v

# Thank You

FOR TAKING THE TIME TO  
READ OUR DOCUMENTATION.

