

## PROJECT DEVELOPMENT PHASE

### SPRINT 3

Team ID	PNT2022TMID46761
Project Name	Real-Time River Water Quality Monitoring and Control System

#### SCREEN INFORMATION:

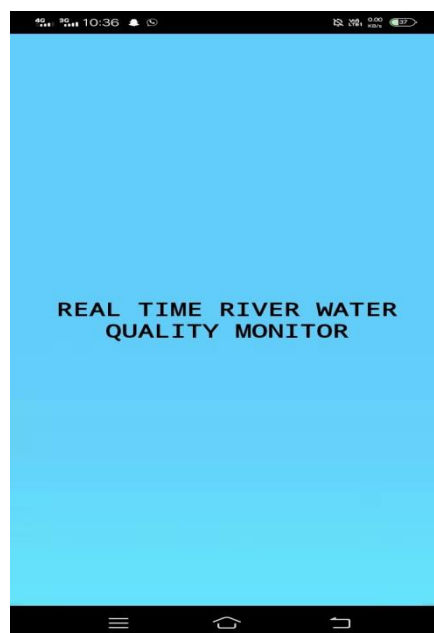
**SCREEN 1:** It is the entry screen of the mobile application and the next screen will be display after 2 seconds.

**SCREEN 2:**It is the login page of the application. Each user has own user ID and password to login to the application.

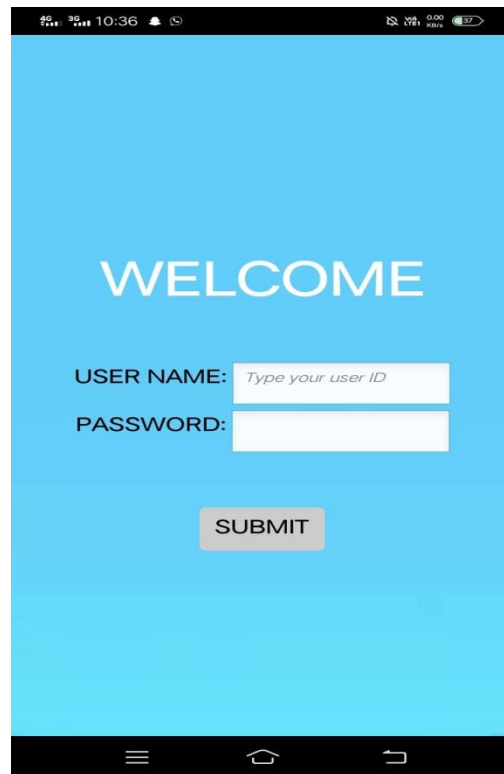
**SCREEN 3:** This screen shows the Temperature,pH and Turbidity values to the user.

#### MOBILE APPLICATION VIEW:

##### SCREEN 1



## SCREEN 2



4G 3G 10:36 5G 0.00 KB/s 37

# WELCOME

USER NAME:

PASSWORD:

SUBMIT

Navigation icons: menu, home, back

## SCREEN 3



4G 3G 10:36 5G 0.00 KB/s 37

# WATER QUALITY

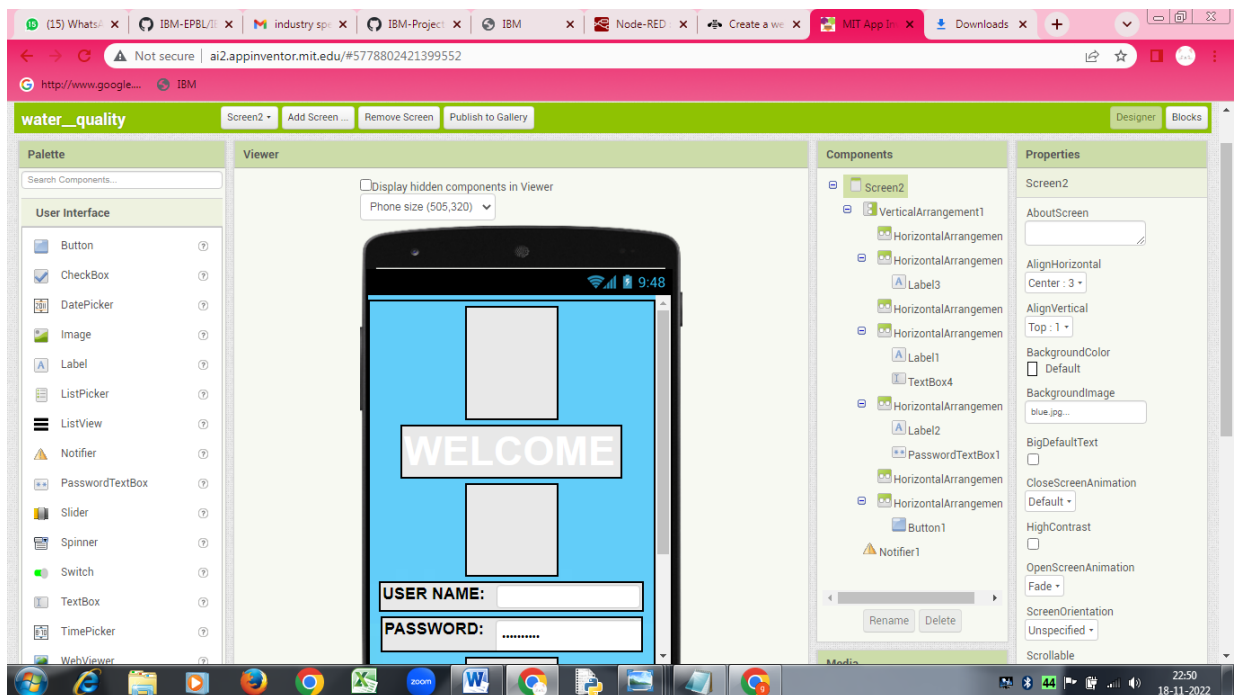
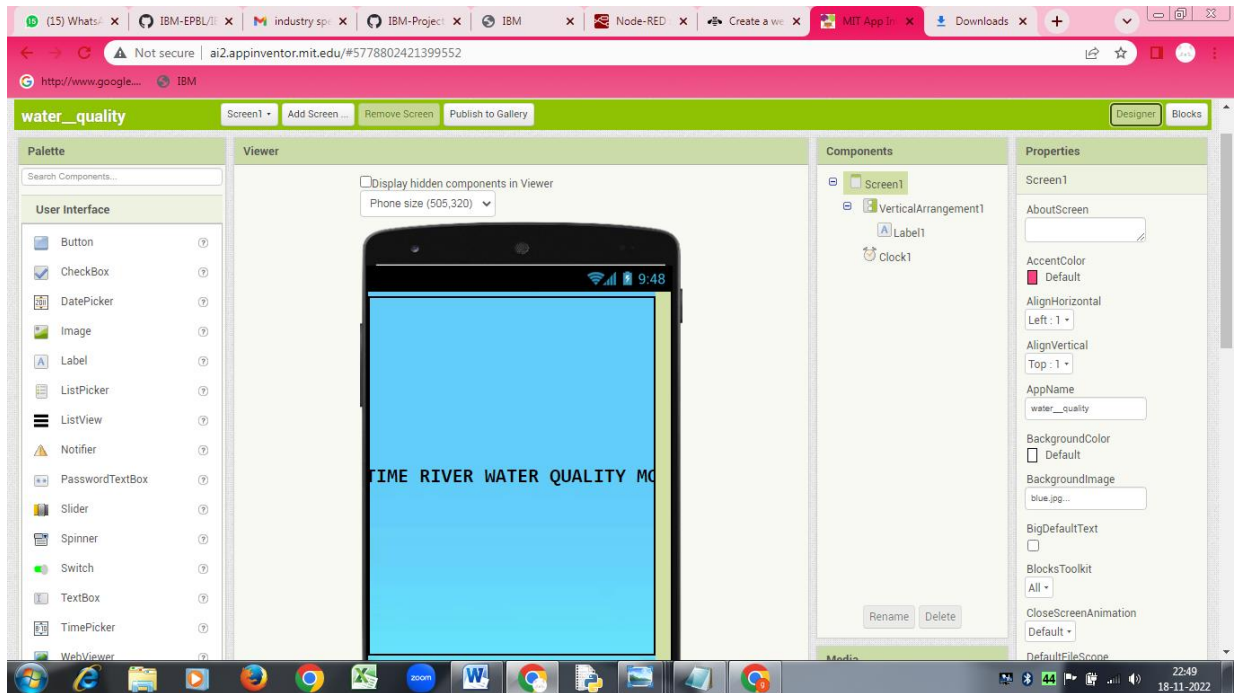
TEMPARETURE: 57  
pH: 2  
TURBIDITY: 91

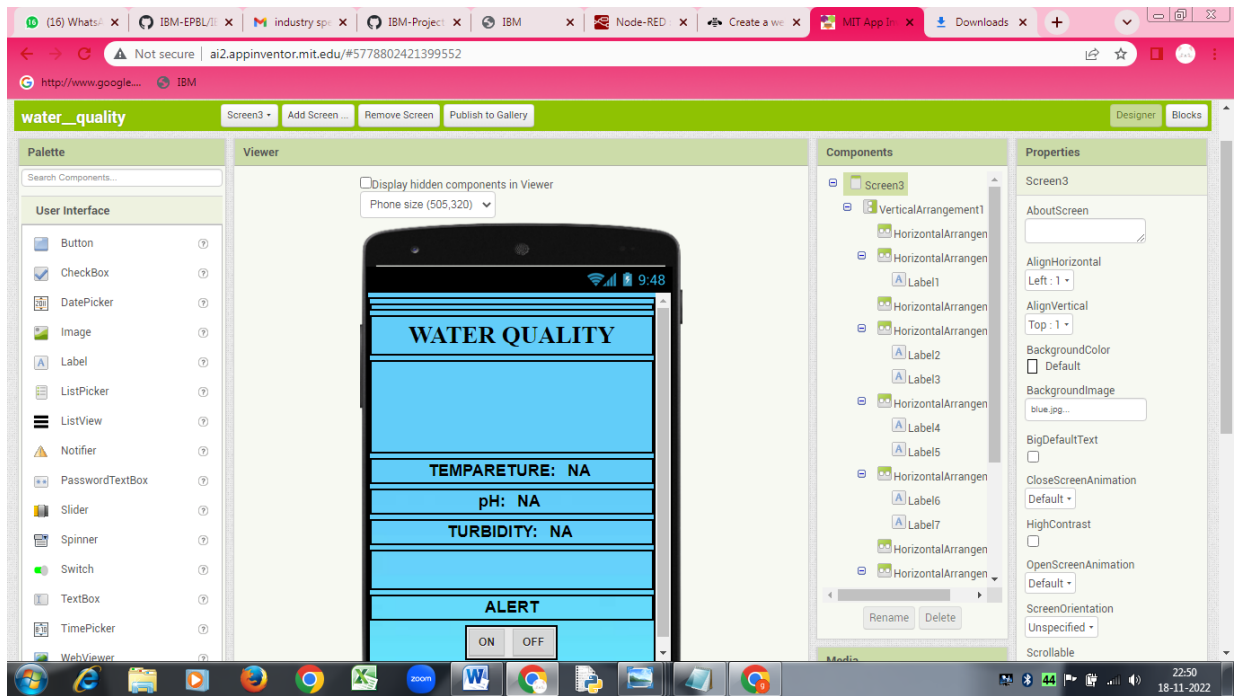
ALERT

ON OFF

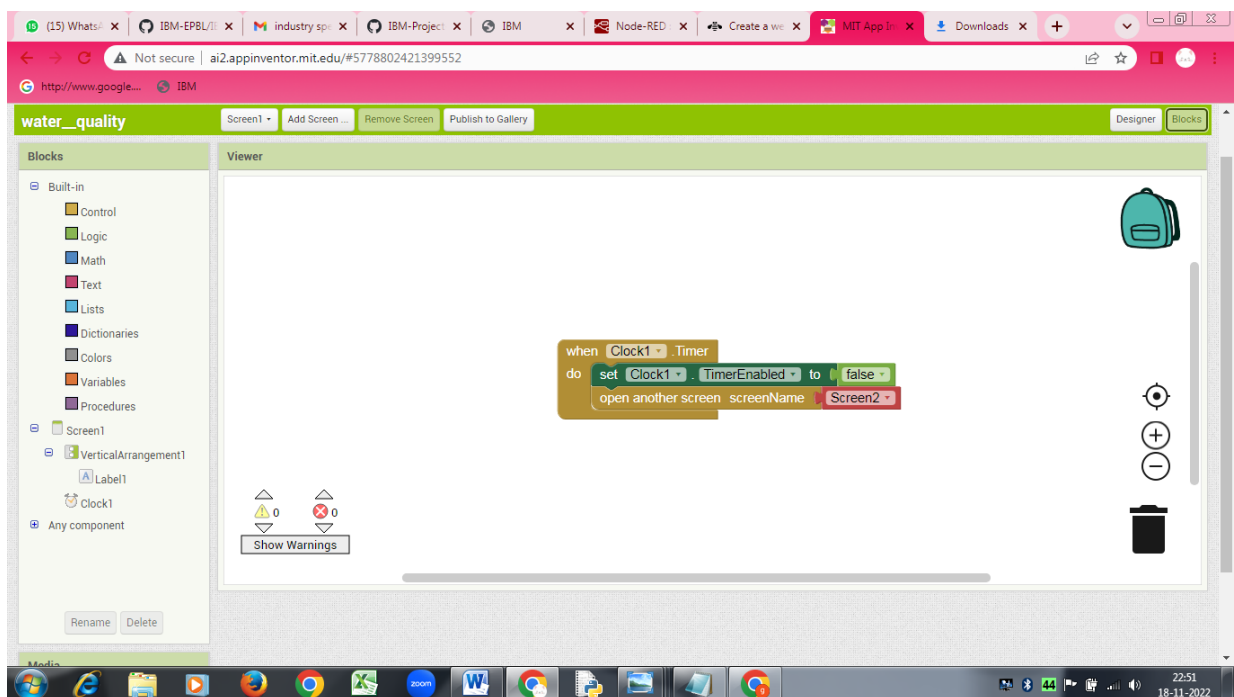
Navigation icons: menu, home, back

# FRONT END DEVELOPMENT





## BACK END DEVELOPMENT



MIT App Inventor interface showing the 'water\_quality' app. The 'Blocks' panel on the left lists categories: Built-in, Screen2, and Screen3. The 'Viewer' panel displays the logic for 'Button1.Click':

```
when Button1.Click
do
  if TextBox4.Text = 'WATER' and PasswordTextBox1.Text = 'WATER'
  then
    open another screen screenName Screen3
  else
    call Notifier1.ShowAlert
    notice 'check your credentials'
```

The 'Show Warnings' icon is visible at the bottom left of the viewer.

MIT App Inventor interface showing the 'water\_quality' app. The 'Blocks' panel on the left lists categories: Built-in, Screen3, and Screen4. The 'Viewer' panel displays the logic for 'Clock1.Timer' and 'Web1.GotText':

```
when Clock1.Timer
do
  set Web1.Uri to 'http://159.122.175.75:32167/sen'
  call Web1.Get

when Web1.GotText
url responseCode responseType responseContent
do
  set Label3.Text to look up in pairs key 'Temp' pairs
  call Web1.JsonTextDecode jsonText get responseContent
  if not found
  set Label5.Text to look up in pairs key 'pH' pairs
  call Web1.JsonTextDecode jsonText get responseContent
  if not found
  set Label7.Text to look up in pairs key 'Turbidity' pairs
  call Web1.JsonTextDecode jsonText get responseContent
```

The 'Show Warnings' icon is visible at the bottom left of the viewer.

# BLOCKS FOR ALERT ON/ OFF

