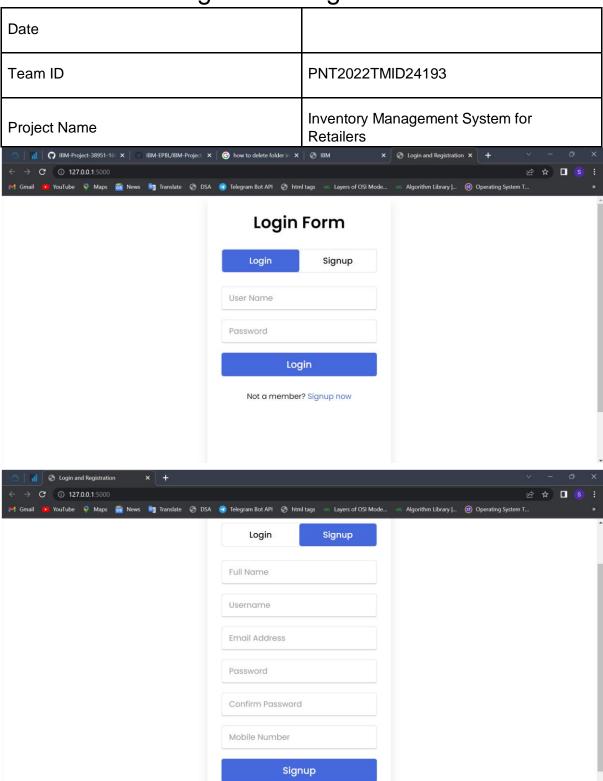
## Login and Registration



## Code

@app.route('/login', methods = ['POST'])
def login\_check():

Handles the login process

```
:return: Login page
  # capture the username and the password entered by the user and remove trailing
and leading whitespaces username = request.form['uname'].rstrip().rstrip()
entered_password = request.form['password']
  hash object = sha256(entered password.encode())
  hashed_entered_password = hash_object.hexdigest()
  # get the expected password corresponding to the username
  expected_password = fetch_password(username)
  if not expected password:
     # if expected password is not found in the database, it means no such account is
registered yet.
     return render template('login.html', err msg = 'Register an account first!')
  elif hashed_entered_password != expected_password:
     # if the entered and expected password don't match, it means the password entered is
wrong. return render_template('login.html', err_msg = 'Wrong username or password')
  else:
     # if no errors occur, log the user in and create a session.
     session.update({'username': username})
    # fetch the inventory items corresponding to the user. It's stored in the form of a JSON
as CLOB
    tableContents = fetch table contents(username)
     # the value returned above will be of the form list[tuple[str/int/float, str/int/float, ...]]
     if tableContents[0][0] is not None:
       # if the contents are actually present, convert the JSON to python Dict.
       tableContents = loads(tableContents[0][0])
       # print(tableContents['cid'][1])
       # if no content is present, pass an empty list to the template which will be evaluated
as 'false' by the
       # jinja2 template engine. tableContents = [] return
     render_template('dashboard.html', greeting=f'Hello, {username}!',
    tableContents=tableContents)
  # unreachable code. It's there because I'm paranoid.
  return 'You weren\'t supposed to be here :/'
@app.route('/signup',
methods=['POST']) def signup(): """
```

```
Handles the signup process.
  :return: Signup Webpage or Dashboard
  # capture the details passed from the form and remove trailing and leading whitespaces.
  fullName = request.form.get('fname').lstrip().rstrip()
  username = request.form.get('uname').lstrip().rstrip()
  email = request.form.get('email').lstrip().rstrip()
  password = request.form.get('password') mobile =
  request.form.get('mobile').lstrip().rstrip()
  hash_object = sha256(password.encode())
  hashed_password = hash_object.hexdigest()
  try:
    # try to create account with the given details create_account(fullName,
     username, email, hashed_password, mobile)
  except IntegrityError:
     # integrity error means either NOT NULL or UNIQUE constraint has been violated. #
     the former being highly unlikely because of the validation checks in the front end.
     return render_template('login.html', err_msg = 'The account exists already. Please
     log
in.')
  else:
    # if no errors occur, log the user in and create a session.
     # session.update({'username': username})
     # redirect the user to the login procedure, code = 307 specifies to preserve the
HTTP method used originally # (POST in this case) return redirect(url_for('login_check'),
code=307)
     # return render template('dashboard.html', greeting = f'Welcome, {fullName.split()[0]}!
({username})')
  # unreachable code return 'You weren\'t supposed to be
  here. Please go back'
@app.route('/check-username', methods = ['POST'])
def check_username():
  Checks if the username is already present in the database or not.
  :return: 'Exists' if present, else return the passed email itself.
  ....
  # get the passed email and remove leading and trailing whitespaces, if any.
  passed_username = request.form.get('username').lstrip().rstrip()
  # check if the email exists or not exists =
  check_username_existence(passed_username)
```

```
if exists:
     return 'Exists', 403
  return passed_username, 200
@app.route('/check-email', methods = ['POST'])
def check_email():
  Checks if the email is already present in the database or not.
  :return: 'Exists' if present, else return the passed email itself.
  # get the passed email and remove leading and trailing whitespaces, if any.
  passed_email = request.form.get('email').lstrip().rstrip()
  # check if the email exists or not exists =
  check_email_existence(passed_email)
  if exists:
     return 'Exists', 403
  return passed_email, 200
@app.route('/add-commodity', methods =
['POST']) def add_commodity(): #
print(request.form)
  details = request.form.to_dict() tableContents =
  fetch_table_contents(session.get('username'))
  if tableContents[0][0] is None:
     tableContents = {field: [] for field in FIELDS}
  else: tableContents =
    loads(tableContents[0][0])
  if details.get('cid') in list(tableContents.values())[0]:
     return f"Item {details.get('cid')} already exists.", 400
  for key, value in tableContents.items():
  value.append(details.get(key))
  details_ison = dumps(tableContents)
  print(details_json) print(details)
```

```
try:
    add_details_to_db(session.get('username'), details_json)
except Exception as exception:
    print(exception) return 'Something went
    wrong, try again', 403
else:
    return 'Details Added.', 200
    # return redirect(url_for('login_check'), code = 307)

return 'add req rcvd'
```

Some other codes like handling verification in the front end, storing in the database, verifying in backend etc. have been skipped for the sake of clarity.