

## EXPERIMENT no. 6

Implement authentication and user roles with JWT

```
> Users > Lenovo > Desktop > jwt-auth-app > models.py > ...
1  from werkzeug.security import generate_password_hash, check_password_hash
2
3  class User:
4      def __init__(self, id, username, password, role='user'):
5          self.id = id
6          self.username = username
7          self.password_hash = generate_password_hash(password)
8          self.role = role
9
10     def check_password(self, password):
11         return check_password_hash(self.password_hash, password)
12
13     # In-memory user store
14     users = []
15     user_id_counter = 1
16
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

\$ C:\Users\Lenovo>

```
C: > Users > Lenovo > Desktop > ☒ TODO.md > # TODO: Implement JWT Authentication and User Roles
1  # TODO: Implement JWT Authentication and User Roles
2
3  - [x] Create project directory `jwt-auth-app`
4  - [x] Create `requirements.txt` with necessary dependencies
5  - [x] Create `models.py` for User model with roles
6  - [x] Create `auth.py` for authentication routes (register, login)
7  - [x] Create `app.py` for main application setup
8  - [x] Create `main.py` for protected routes with role checks
9  - [x] Install dependencies using pip
10 - [x] Create Postman collection for API validation
11 - [x] Run the Flask application and test endpoints
12
```

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```
C: > Users > Lenovo > Desktop > jwt-auth-app > app.py > ...  
1  from flask import Flask  
2  from flask_jwt_extended import JWTManager  
3  
4  app = Flask(__name__)  
5  app.config['JWT_SECRET_KEY'] = 'super-secret-key' # Change this in production  
6  
7  jwt = JWTManager(app)  
8  
9  from auth import auth_bp  
10 from main import main_bp  
11 app.register_blueprint(auth_bp, url_prefix='/auth')  
12 app.register_blueprint(main_bp, url_prefix='/api')  
13  
14 if __name__ == '__main__':  
15     app.run(debug=True)  
16  
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  
PS C:\Users\Lenovo>
```

