

1 Crowdfunding Console Application

A Python-based console application for managing crowdfunding projects with user authentication.

1.1 Features

- **User Management**
 - User registration with validation
 - Secure login system
 - Egyptian phone number validation
 - Email validation
 - Password hashing for security
- **Project Management**
 - Create new projects
 - View all projects
 - View user-specific projects
 - Edit existing projects
 - Delete projects
 - Search projects by date

1.2 File Structure

- `app.py`: Main application entry point
- `auth.py`: Authentication related functions
- `projects.py`: Project management functions
- `utils.py`: Utility functions and helpers
- `users.json`: User data storage
- `projects.json`: Project data storage

1.3 Installation

No external packages are required. The application uses Python's standard library.

```
python app.py
```

1.4 Usage

1. Start the application by running

```
python app.py
```

2. Choose from the main menu:

- Register a new account
- Login to existing account
- Exit

3. After login, access project management features:

- Create new projects
- View all projects
- View your projects
- Edit your projects
- Delete your projects
- Search projects by date
- Logout

1.4.1 Standard Library Modules

- `json`: Data storage and retrieval
- `datetime`: Date validation and handling
- `re`: Regular expressions for validation
- `hashlib`: Password hashing (SHA-256)
- `getpass`: Secure password input
- `os`: File operations and path handling

1.5 Data Validation

- Email format validation
- Egyptian phone number validation
- Date format validation (YYYY-MM-DD)
- Project date range validation
- Project target amount validation

1.6 Data Storage

- User data is stored in JSON format
- Project data is stored in JSON format
- Passwords are stored as SHA-256 hashes

1.7 Author

This crowdfunding console application was created as a final project for ITI python web development course.