SKILLSWAP – A Skill Sharing Platform

Group Number - 5

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⁰ GitHub

Skill Swap | Trello

1) Introduction:

Skill Swap is a Django-based web platform where users can either offer or request skills (e.g., guitar lessons, coding help, cooking tutorials). The aim is to connect people who want to learn with those who are willing to teach through a simple and functional interface.

2) Project Objectives:

The project aims to create a collaborative platform focused on knowledge exchange. Target users include students, hobbyists, freelancers, and educators.

3) Core Features:

- User Authentication Signup, login, logout, and profile management.
- Skill Listings Users can offer or request skills with detailed information.
- Search and Browse Filter skills by type or category
- Contact System Basic form-based messaging between users
- Ratings and Reviews Leave feedback after each session.

4) Included Optional Features:

- Profile Pictures
- Average rating
- Admin dashboard
- Skill categories/tags

5) System Design & Architecture:

Skill Swap uses Django's MVT architecture:

- Models define the data structure
- Views control logic and data processing
- Templates render the final HTML to users

The system includes apps for user profiles, listings, messaging, and reviews.

6) Technology stack:

Backend: Django (Python)

Frontend: HTML, CSS, Bootstrap

Database: SQLite

Version Control: Git & GitHub

Project Management: Trello, Scrum Methodology

7) GitHub workflow:

Main – Stable version

Dev – ongoing development

• Feature – for individual tasks

8) Agile & Scrum Summary:

Day 1: Sprint planning and Trello board setup

Day 2-6: Daily standups, development

Day 6: Freeze new features, UI polishing

Day 7: Final sprint and documentation

Day 8: Demo presentation

9) Team contributions:

In this project, we followed a **rotational task-sharing model** to ensure that every member gained hands-on experience with all aspects of a Django project. Rather than assigning fixed roles, we divided our work based on daily sprints and feature files.

Each member worked on different parts of the system throughout the development cycle:

- Day-based task division: We created a schedule where each member handled different files each day—for example, one worked on views.py on Day 1 and another on models.py, then we rotated the tasks the next day.
- Shared repositories: All work was pushed via GitHub with proper branching and peer review through pull requests.
- Cross-functional collaboration: Everyone contributed to planning, coding, debugging and reviewing each other's work.
- Daily standups: We discussed goals and issues to keep everyone synced.

This approach helped us:

- Build a strong understanding of the full Django stack.
- Promote code consistency.
- Learn from each other's work.

10) Conclusion:

Skill Swap demonstrates how Django can be used to build real-world web platforms with full MVT integration and collaborative teamwork.