**Survey System Using Django**

**Project Report**

*Submitted in partial fulfillment of the requirements for the course of*

**INFO 537 – Tools for Data Science**

By

Jake Castellano

Nayanpreet Chhabra

Prasanna Bidkar

Shunottara Ingle

**Under the guidance of**

**Prof. Hafiz M. Ali**

Binghamton University

State University of New York

**Contents**

1. GitHub Repository
2. Tools and Technologies Used
3. Project Components and Design
4. Team Contributions and Peer Ratings
5. Challenges faced
6. Conclusion

**GitHub Repository**

[Link to Repository](https://github.com/jakecast110/final-project--1-)

The repository includes complete source code, organized with clearly defined folders for models, views, templates, and static assets. The commit history demonstrates iterative progress and contributions from all team members, with detailed commit messages outlining changes.

**Tools and Technologies Used**

**Backend Development:**

* Python and Django Framework
* Postgresql for Local Database

**Front-end Development:**

* HTML and CSS for Layout and Styling
* Bootstrap for Responsive Design
* JavaScript for Interactivity

**Utilities:**

* Git and GitHub for version control

**Project Components and Design**

**1. Authentication System**

* Role-based access control: Survey Creators and Takers
* Secure password validation with JavaScript-based dynamic feedback.

**2. Creator Dashboard**

* Manage surveys: Create, edit, republish, close, and view results.
* Dynamic form handling for adding questions and options.

**3. Taker Dashboard**

* Browse and participate in surveys.
* Notification for surveys already taken.

**4. Modern UI/UX Design**

* Consistent styling with transparent containers, vibrant buttons, and professional layouts.

**Team Contributions and Peer Ratings**

**Team Member 1 :** Jake Castellano

**Contributions:** Survey Taker Functionality

* Designed the survey taker dashboard to list available and completed surveys.
* Developed logic to handle survey responses and stored them dynamically in the database.
* Focused on creating a user-friendly interface for survey participation.

**Peer Rating:** 10/10

**Team Member 2 :** Nayanpreet Chhabra

**Contributions:** Survey Creator Functionality

* Implemented survey creation, editing, and question management features.
* Designed the survey creator dashboard and integrated dynamic formsets for adding questions.
* Contributed to the backend logic for survey publishing and republishing.
* Report Writing

**Peer Rating:** Self

**Team Member 3 :** Prasanna Bidkar

**Contributions:** UI/UX and Frontend Design

* Designed the landing page, login, registration, and other template designs.
* Ensured modern and attractive styling for buttons, layouts, and background images.
* Incorporated Bootstrap for responsive design and streamlined the project’s overall UI.

**Peer Rating:** 9/10

**Team Member 4 :** Shunottara Ingle

**Contributions:** Backend and Admin Features

* Developed the models and forms for surveys, questions, and responses.
* Handled role-based access control and data validation.
* Contributed to repository management, resolving conflicts, and maintaining coding standards.

**Peer Rating:** 9.5/10

**Challenges Faced**

**Dynamic Form Handling:**

* Adding and managing dynamic forms for survey questions and options was complex.
* **Resolution:** Used Django formsets and JavaScript for seamless integration.

**Role Management:**

* Ensuring creators and takers had separate, well-defined roles.
* **Resolution:** Developed a robust role-based access system using Django models.

**Conflict Resolution in Git:**

* Collaborating across multiple branches led to frequent merge conflicts.
* **Resolution:** The team followed structured Git workflows and resolved conflicts collaboratively.

**User Interface Consistency:**

* Maintaining a consistent and modern UI throughout the project.
* **Resolution:** Used Bootstrap and custom CSS for all templates.

**Conclusion**

The Survey System project was a collaborative effort that showcased the technical skills, teamwork, and dedication of the four-member team. The system successfully fulfills the requirements of enabling users to assume dual roles as either **Survey Creators** or **Survey Takers**, providing a seamless and dynamic user experience. By leveraging modern technologies and adhering to best practices in software development, the team has developed a robust and scalable application.