

# STUDENT FEEDBACK DJANGO WEB APPLICATION.

Thursday, August 10, 2023 12:19 PM

## Table of contents.

1. Introduction
2. System overview
  - o Architecture
  - o Technologies used
3. Features
  - o User roles
  - o Feedback submission
  - o Data management
  - o Analytics and reporting
4. Installation and setup
  - o Prerequisites
  - o Installation steps
5. Usage guide
  - o User registration and login
  - o Providing feedback
  - o Viewing feedback
  - o Generating reports
6. Troubleshooting
7. Future enhancements
8. Conclusion
9. References

## 1. Introduction.

The Student Feedback Django Web Application is a comprehensive tool designed to facilitate the collection, analysis, and reporting of feedback from students about various aspects of an educational institution. This documentation provides an in-depth overview of the web application, its architecture, features, installation steps, and usage guide.

## 2. System Overview.

### • Architecture.

The web application follows the model-view-controller(MVC) architecture pattern, with a strong emphasis on the Django framework's built-in components.

- Model: represents the data structure and interacts with the database.
- View: defines how data is presented to users.
- Controller: handles user input, manages data flow, and updates the model and view.

### • Technologies used.

Django framework: Provides the foundation for building the web application.

Python: The primary programming language used for server-side logic.

Google sheets: For developing the feedback questions.

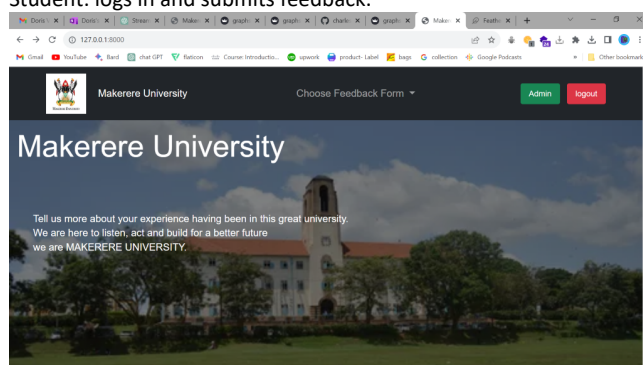
HTML, CSS, JavaScript: Used for front-end development and user interface.

Spreadsheets: for storing feedback.

Streamlit: Utilized for data visualization and analytics.

## 3. Features.

- User roles.
- Admin: manages user accounts, reviews feedback submissions, generates reports.
- Student: logs in and submits feedback.



The landing page.

- Feedback submission.
- Students can provide feedback on courses, instructors and campus facilities.
- Feedback includes ratings, comments and optional suggestions.

The screenshot shows a web browser displaying the Makerere University feedback system. The page has a header with the university logo and navigation links. The main content area is titled 'Instructor form' and contains a user profile section with an email address and a 'Switch account' link. Below this is a rating scale for 'How satisfied are you with the overall teaching quality of this instructor?' with a scale from 1 (Very Dissatisfied) to 5 (Very Satisfied). There are five radio buttons corresponding to the scale. At the bottom, there is a question: 'Did the instructor effectively communicate course objectives and expectations at the beginning of the term?'.

*A sample of the feedback forms to be filled by the student.*

- Data Management.
- All feedback submissions are stored in spreadsheets and google drive.
- Data integrity and security are maintained through Django's built-in mechanisms.
- Analytics and reporting.
- Admin users can generate reports and visualize trends using graphs.
- Reports provide insights into course and facility effectiveness, and instructor performance.

#### 4. Installation and setup.

- Prerequisites
  - Python(3.11.1)
  - Django
  - Google sheets
  - Streamlit
- Installation steps
  - Clone the repository.
  - Install dependencies
  - Configure database settings
  - Run migrations
  - Create an admin user
  - Start the development server

#### 5. Usage guide.

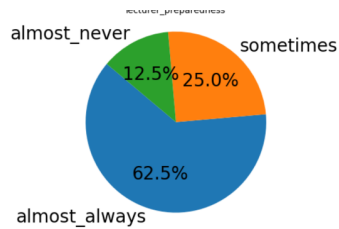
- Access the application via a web browser.
- Log in as admin using the provided forms.

The screenshot shows the login page of the Makerere University application. It has a header with the university logo and the text 'Please sign in'. Below this, there are two input fields: 'Username' with the value 'admin' and 'Password'. A green 'Sign in' button is located at the bottom of the form.

*The log in page for administrator.*

- Providing feedback.
- Students can provide rating and comments based on the experience.
- Optional suggestions can also be includes.
- Viewing feedback.
- This is done by the administrator.
- Graphs provide visual insights into feedback trends.
- Reports can be filtered by date.

The screenshot shows a web browser displaying a feedback report. At the top, there is a dropdown menu with the text 'lecturer\_preparedness'. Below this, there is a section titled 'Lecturer preparedness' which contains a table of feedback data.



*A sample of data visualized by the administrator.*

## 6. Troubleshooting.

- Ensure all prerequisites are properly installed.
- Check database configurations in 'settings.py'.
- Review error messages for guidance.

## 7. Future enhancements.

- Integration with email notifications for admins.
- Support for anonymous feedback submission.
- Multi-language support for international users.
- Integration with external tools for enhanced analytics.

## 8. Conclusion.

The student feedback Django we application serves as a valuable tool for educational institutions to gather and analyze feedback from students, facilitating continuous improvement in course quality and instructor performance.

## 9. References.

Django documentation: <https://docs.djangoproject.com/>

Google sheets Documentation: <https://support.google.com/docs>

Streamlit Documentation: <https://docs.streamlit.io/>