

Ahar Setu

Real time functionalities

1. Beneficiary Registration & Login:

- The project allows beneficiaries to **register and log in** to the platform, storing their details (username, contact, email, password, city).
- **Password Security:** Passwords should be stored securely using `generate_password_hash` (though the code does not yet use this for storage).
- **Real-Time Registration Validation:** If the passwords don't match, the system alerts the user immediately via a flash message, ensuring **instant feedback**.

Real-Time Functionality:

- Immediate form validation and database storage, allowing users to know the registration status instantly.
- Once registered, beneficiaries can log in and access real-time information about available food donations.

Benefits:

- Enhances user experience through real-time validation and access to food availability.

2. Real-Time Password Update:

- A **password update feature** can be implemented, allowing beneficiaries and donors to change their passwords securely in real time. The system can check the current password against the stored hash (check_password_hash) and then allow updates.

Real-Time Functionality:

- The ability to change passwords instantly ensures that users have continuous control over their account security.

Benefits:

- Users can maintain control of their account and ensure that only they can access it.

3. Food Post Searching by City:

- One of the major functionalities is **searching for food posts based on the city**. The platform can offer real-time search capabilities where beneficiaries can filter food donations by location.

- When a beneficiary selects a city, the system will query the database and return food posts that are available within that city in the last 24 hours. This can be done with a SQL query filtering by both **city and time**:

Real-Time Functionality:

- Dynamic searching based on location ensures that beneficiaries see the most **relevant and up-to-date posts**.
- Integration of a 24-hour time filter ensures that only **fresh food donations** are displayed, enhancing the value of the posts.

Benefits:

- Ensures food donation data is always **current** and minimizes wastage by focusing on the latest available donations.
- Beneficiaries can access local donations, making it easier to connect with nearby donors.

4. 24-Hour Food Post Refresh:

- The system automatically **refreshes food posts every 24 hours**, ensuring that only the most recent donations are shown. This refresh could be

triggered at user login, during searches, or via background jobs.

- Posts that are older than 24 hours are excluded, which keeps the donation list **clean and relevant**.

Real-Time Functionality:

- Automated removal of old or expired posts enhances the platform's accuracy.
- Allows beneficiaries to see fresh food posts without any manual refresh required.

Benefits:

- Keeps the donation list relevant and ensures that the food posts displayed are still available.

5. Daily Email Notifications for Donors:

- **Real-time email notifications** are sent to donors to confirm daily food availability. If the donor responds, their food availability status is updated in the system and shown to beneficiaries.
- This feature can be managed via scheduled tasks or background services using Flask-Mail to notify donors.

Real-Time Functionality:

- Automated emails at a specific time each day ensure that donor responses are **captured and processed** without delays.
- Based on their responses, the system updates food availability in real time, which is reflected in the dashboard or search results.

Benefits:

- Encourages donors to stay active and responsive by confirming their daily surplus.
- Keeps food availability information up-to-date for beneficiaries.

6. Feedback System:

- Beneficiaries can provide feedback in real time after receiving food donations. This feedback is stored in the database and can be viewed by donors or administrators.

Real-Time Functionality:

- Instant feedback after receiving food creates a **live review system** that can be used to improve future donations and manage donor/beneficiary relationships.

Benefits:

- Provides a **real-time accountability loop**, ensuring that donors know how their donations are being used and enabling them to make improvements if necessary.

7. Dashboard & Notifications:

- The project could also include a **dashboard** for beneficiaries and donors, providing them with a real-time overview of their food donations, feedback, and notifications.
- Beneficiaries can see available food posts filtered by city, while donors can see their contribution history and receive alerts if new feedback or queries arise.

Real-Time Functionality:

- A live dashboard will continuously update users with relevant data, ensuring they are kept informed of the most important information in real time.

Benefits:

- A **centralized hub** for managing donations and keeping track of all ongoing interactions.
 - Ensures all parties remain **informed and responsive**.
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Conclusion:

Your project includes key real-time functionalities such as **password updates, food post searching by city, daily email notifications for donors, and a 24-hour refresh for food posts**. These features make the system dynamic and responsive, enhancing the user experience by providing **up-to-date information** and interactions. The project also benefits from automated notifications and real-time database updates, ensuring users can act based on **current data**.