



Introduction

We all have seen *Ekti Harano Biggopti* in our daily basis. Sometimes Miking needed to find lost stuffs. Newspaper also contain *Harano Biggopti*.

So, we thought of building a common platform named "*Khuje Dei*", which can make the connection between people who has lost something and who has found something much efficient and easier way. To connect with larger set of peoples we also have integrated Social media for faster service and security. In case of finding lost special child or anonymous human, we also integrated AI based face search to give faster and easier search experience to the users.

Scope

The scope of this project is limited to users who have lost something or who has found something. Our system will keep track categorized lost/found objects also with location, in which area the item has lost. To make service better and faster Messenger Bot provides communication service in our system.

Users & their roles

Anonymous user:

- Anonymous users will be able to register to our website and become registered users so that they can access all the features.
- Anonymous users can view insensitive or public data in lost post.

General user:

- General user can **create post** on lost(products and human) and found stuffs.
- General user can **view only lost post** and **comment** on that.

- General user can **search** based on lost stuff and search by face in case of lost human related post.
- **Get notified** via Facebook messenger if our system can detect matching between lost item and found item.

Admin user:

- Admin user can disable or remove a registered user's account.
- Admin user can delete and modify Category , Model etc.

Use cases of the system:

Registration

Anonymous users are the actors of the use case.

- General User : System will collect user information and generate a token for verification. When the user submit that token into our facebook page messenger then our system will create a general user and sync user's messenger account with our system.

Add post

General user and **System** are the actors of the use case.

User can post about lost/found products by selecting product category , model, date, location , post-category (lost/found/human) and providing special sign of lost stuffs and images.

Comment on Post

General user and **System** are the actors of the use case.

Users can comment on public posts.

Search

General user and the **system** are the actors of the use case.

- Search by product : Users can search products by category, model, location, date etc.
- Search by human face : Users can search closest face matching human by uploading an face Image.

Update Status

General user and **System** are the actors of the use case.

Users can delete post and System will automatically update post status.

Notify the Users

System is the actors of the use case.

- If lost product matches with found product then system will notify to the user who found the product with a request and special sign of that product provided by the user who lost the product via messenger bot.
- If the user who found the product can verify by special sign of that product, will accept request via messenger then system will notify the user who lost the product with contact info via messenger.

Disabling and Removing an User

Admin User and the **system** are the actors of the use case.

An admin user can verify a new user or disable an User from further access to the system.

Technologies

Backend

- Java Spring Boot
- JPA(Hibernate)
- Spring Security
- MySQL Database
- External API(Beta Face recognition API , Geocoding , Messenger Chat-bot)

Frontend

- ReactJs
- Material UI
- Ajax