# **Know Your Ghats**

An Android Informative Application

Dedicated to

National Mission for Clean Ganga, DoWR, RD and GR, Ministry of Jal Shakti

Team: TESLAA

Team Leader : Debarpito Sarkar

Team Members : Shounak Banerjee, Riddhi Das, Sunanda Roy Chowdhuri, Susmit Basu,

Jayanta Banik

College ID: 1-3509269218

### What is the problem statement?

- The Ganges river is the largest river in India, providing water to 40 % of India's population across 11 states.
- Today it is considered to be the sixth-most polluted river in the world.
- Most of the pollutants include industrial waste, human waste and sewage.
- Pollution of ghats is a huge factor leading to the pollution of the rivers.
- The National Mission for Clean Ganga (NMGC) was set up in October 2016 with only one aim, to clean the Ganges and its tributaries.
- Different cleaning stations were built all these years till date, but it seems to be not much effective. The main reason was the lack of people's knowledge about the river's pollution level and extensive use of river Ghats.
- So the aim of this initiative is to give citizens awareness by means of an user-friendly mobile application containing river Ghat informations.

#### What is new?

- People will now come to know about different ghats and their specifications, what they can
  offer, what they lack, what can be improved.
- This app has a review feature for every single ghat. It can only be given when the individual
  is located within a 1 km radius of the ghat.
- This information will be sent to the Admin side app where the officials can view review for each and every ghat and what problems people face.
- This app has a survey feature where an individual has to answer a few questions regarding the government's initiative and whether he/she wants to help out.
- This app has a feature of adding new ghats which are not present on the app. The user can
  put in the details of that ghat along with at most 2 pictures. All this information will be
  verified in the Admin App by the officials.
- This app has a donation portal which will contain donation links of all the government fund raising events regarding Clean Ganga initiative.

#### What is new?

- This app has a nearby Ghat locator which will detect the closest Normal / Cremation / Ferry / Tourist Ghat based on the user's location and will also show the distance between them.
- In every description page, if one clicks the address of the Ghat, then Google Maps will open
  up showing how to travel to that ghat.
- One of the main features of this ghat is real time synchronization. From the Admin app, current status of every single ghat can be edited and changed accordingly in a matter of seconds. The local river officials can change each and every ghats status accordingly.

### **Opening Slides**

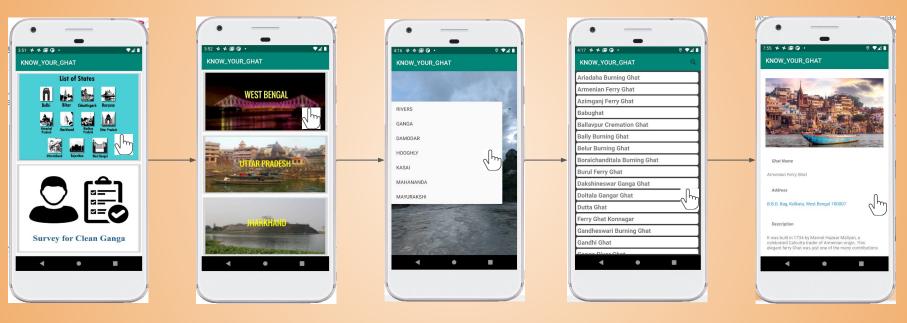


First Slide- App Logo

Second Slide - NMGC Poster

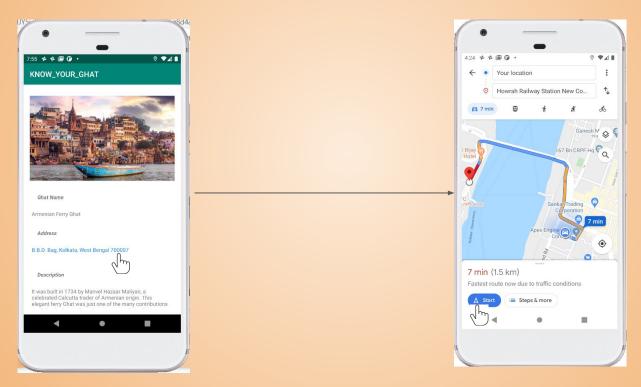
Third Slide - App Features

#### 1. Ghat Description Page:



First Page State List River List Ghat List Description of Ghat

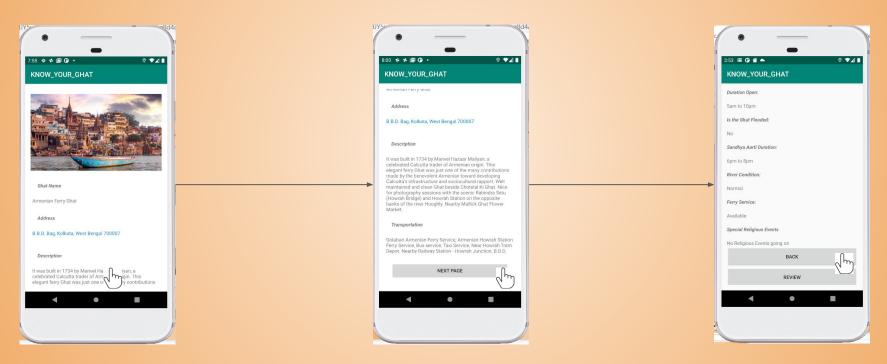
#### Ghat Address Locator :



**Description Page 1** 

**GPS** Route to Ghat

#### 3. Ghat Current Status Page:

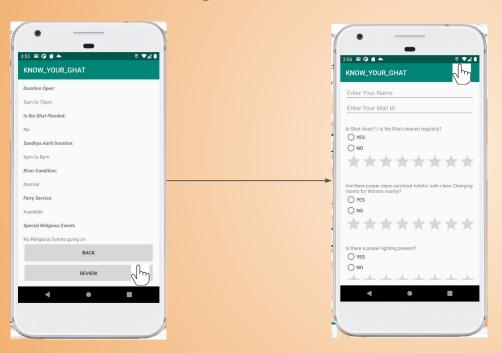


**Description Page 1 Top** 

Description Page 1 Bottom

Ghat Current Status Page

#### 4. Ghat Review Page:





**Description Page 2 Review Button** 

Review Page Top

**Review Page Bottom** 

#### 5. Ghat Review List Page:



**Review List Button** 

**User Review List** 

**User Review Details** 

6. Nearby Hospital Locator:



Nearby Hospitals Button

Google Maps Showing Nearby Hospitals

#### 7. Book Tent Button:

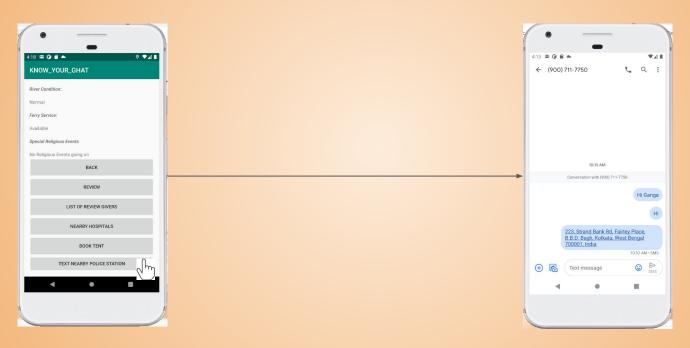


**Book Tent Button** 

Tent Name & Price List

Tent Details and Booking

#### 8. Emergency Button:



**Emergency Text Police Station Button** 

Address of User sent via SMS to Police Station

#### 9. Survey for Clean Ganga



First Page Survey Button

Survey Page Top

Survey Page Bottom

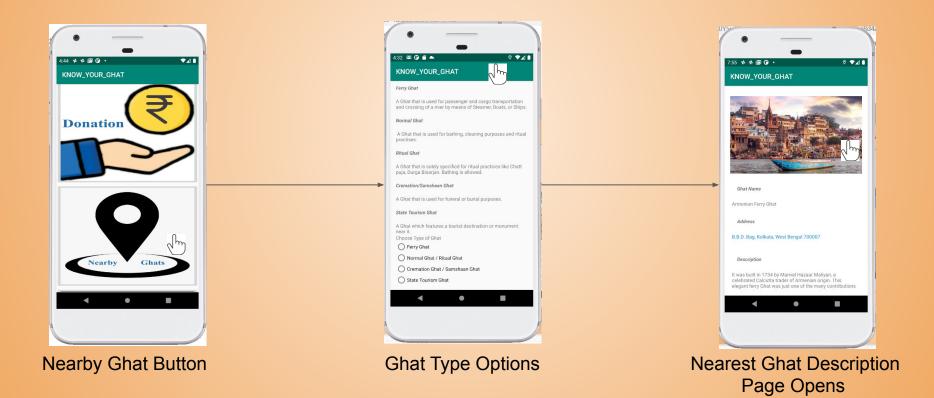
#### 10. Donation Portal:



First Page Donation Button

**Donation Portal** 

#### 11. Nearby Ghat Locator:



#### 12. Add New Ghat Page:



**Add New Ghat Button** 



Add New Ghat Entry Page Top



Add New Ghat Entry Page Bottom

#### 13. Biodiversity of Ganga Basin:



Ganga Biodiversity Button

Marine Animals Images

#### 14. National Mission for Clean Ganga Volunteers:



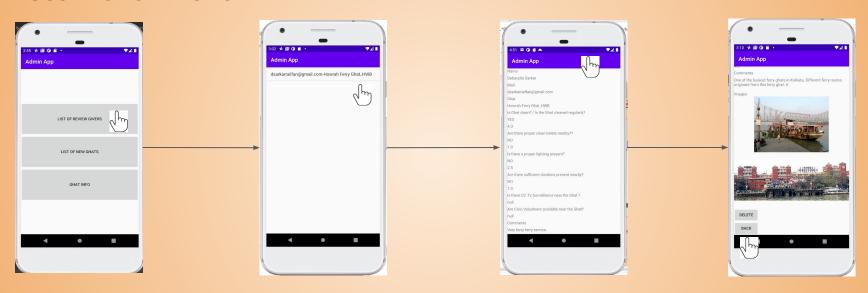
Namami Gange Volunteers Button



Volunteers Project Images

### Features - Admin App

#### 1. User Review Viewer:



First Page

List of User Reviews

A User Review

A User Review Contd.

### Features - Admin App

#### 2. New Ghat Add Page:



First Page

List of New Ghats User Entries

One User Entry

### Features - Admin App

#### 3. Ghat Status Update Page:



First Page

**Ghat Status Insert** 

Display on User App Ghat Description Page 2

#### **Future Enhancements**

- Introducing Machine Learning to detect waste in user given Ghat images.
- Better visualization of the App.
- Adding Multilingual Feature in both the User app and the Admin App.
- Designing a website both for User and Admin.
- Adding Description in Namami Gange Volunteers and Ganga Biodiversity List.
- Voice Search of Ghats (Hindi and English)

## **THANK YOU**