

# Project Report

Title of the Project- Zoo Explorer App

Course Code : CSE225

Course Title: Developing Android Apps

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# DECLARATION

I, am **Prakhyat Singh** , a student of Bachelor of Technology under CSE discipline at Lovely Professional University, Punjab, hereby declare that all the information furnished in this project report is based on my own work and is genuine

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### Project Description:

Zoo Explorer is a mobile application designed to enhance the experience of zoo visitors by providing an interactive, educational, and user-friendly digital companion. The app acts as a smart guide, offering real-time information about animals, navigational assistance across the zoo map, event schedules, and personalized recommendations based on user interests.

Built using **Kotlin** and **XML** for Android development, Zoo Explorer ensures smooth navigation between different sections of the app, with clean UI designs and optimized performance. The app uses **ViewBinding** for safe and easy access to UI components.

### Key Features:

- **Interactive Zoo Map:** Navigate the zoo with a detailed, interactive map that highlights animal locations, amenities, and event areas.
- **Animal Information:** Browse a rich library of animal profiles, each with images, species details, habitats, diets, and fun facts.
- **Event Schedule:** View daily schedules of special events, feeding times, and shows, with real-time notifications.
- **Favorites:** Save favorite animals or spots for quick access later.
- **Personalized Recommendations:** Get suggestions based on favorite animals or visited areas.
- **Multi-Activity Navigation:** Structured into multiple screens like Home, Map, Animals, Events, Profile, and individual Animal Details.
- **Splash Screen:** A welcoming animated screen during app startup.
- **Real-time Updates:** Keep visitors informed about ongoing activities and any changes (optional for future enhancements).
- **Accessibility:** Simple design and clear layouts to ensure the app is easy for all ages to use.

## Tech Stack:

- **Front-End:** Kotlin, XML, ViewBinding
- **Back-End:** (Optional future upgrade) Firebase or a custom server for real-time event updates
- **Tools:** Android Studio

## Modules/Screens:

- **SplashScreen Activity:** Initial loading screen with logo or animation.
- **Home Activity:** Overview of the zoo and main sections access.
- **Map Activity/Fragment:** Shows interactive zoo map.
- **Animals Activity/Fragment:** List of all animals, with search and filter.
- **AnimalDetail Activity:** Full description of the selected animal.
- **Events Activity/Fragment:** Schedule of shows and activities.
- **Favorites Activity/Fragment:** List of bookmarked animals.
- **Profile Activity/Fragment:** Visitor profile (optional basic info).
- **Settings Activity:** Change app preferences, notifications, etc.

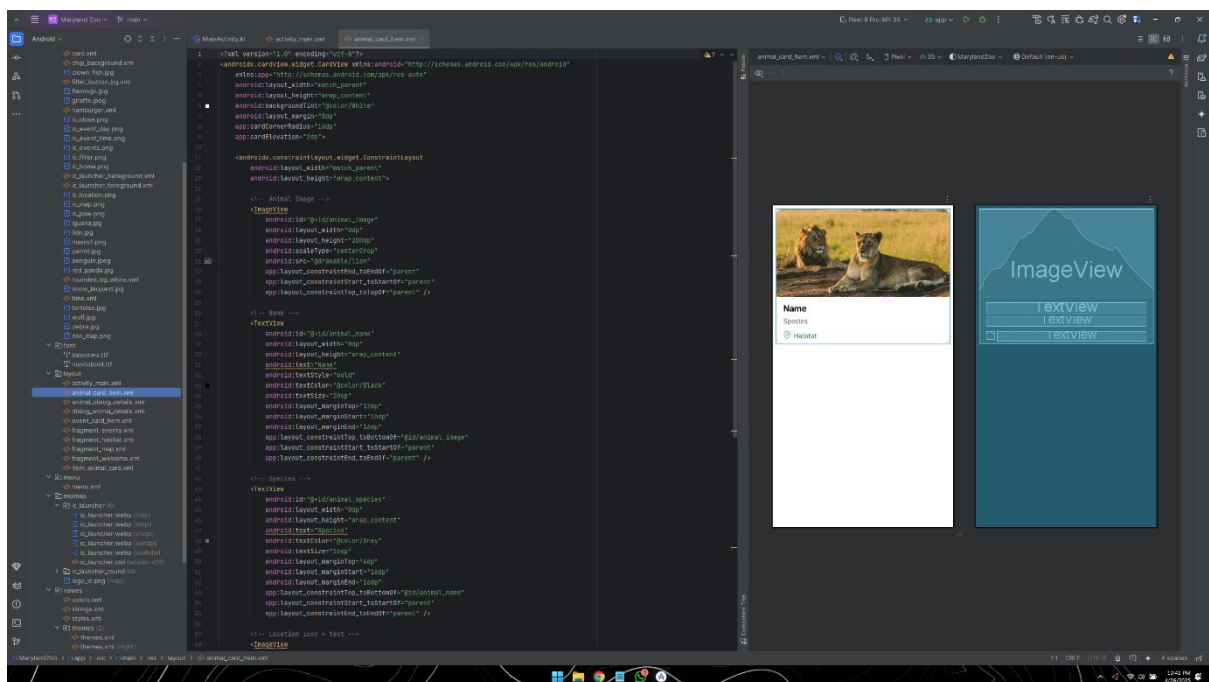
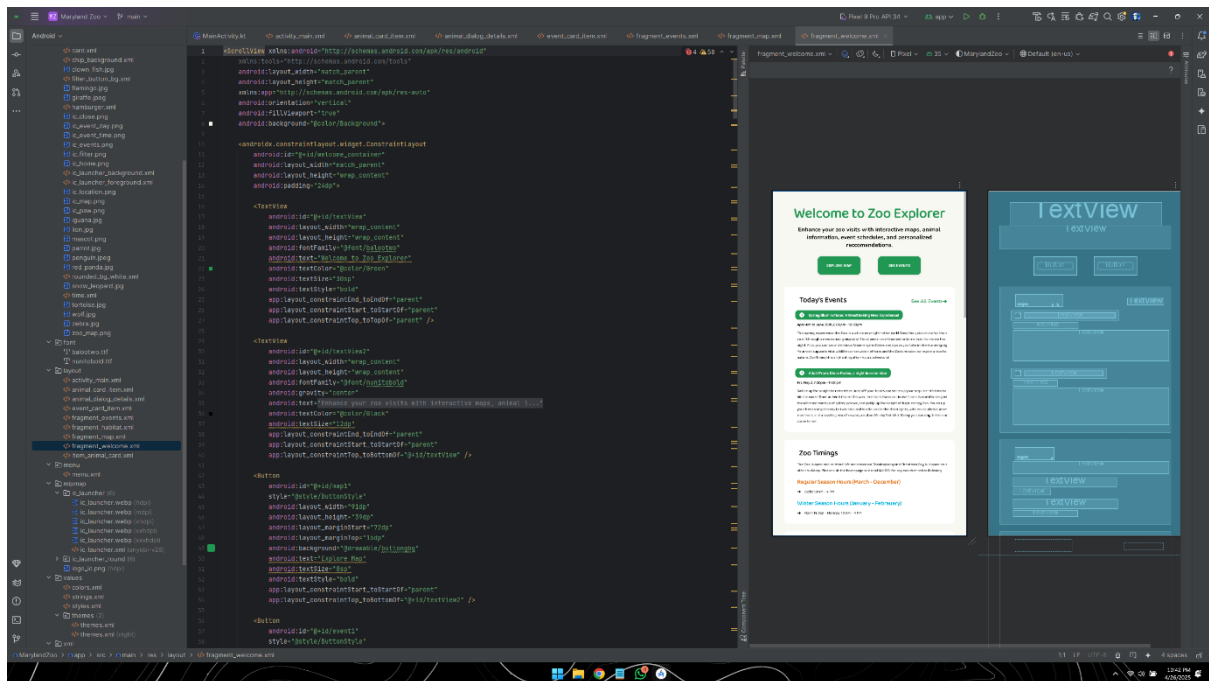
## Why Build Zoo Explorer?

- Makes zoo visits more fun, organized, and educational.
- Reduces paper maps and printed schedules — eco-friendly!
- Engages users with interactive learning and discovery.

## Future Scope:

- Real-time GPS tracking inside the zoo.
- Augmented Reality (AR) animal interactions.
- Multilingual support.
- Integration with zoo ticketing systems.

# Screen Shots of code:



# Zoo Explorer

## Welcome to Zoo Explorer

Enhance your zoo visits with interactive maps, animal information, event schedules, and personalized recommendations.

[EXPLORE MAP](#)[SEE EVENTS](#)

### Today's Events

[See All Events→](#)

#### Spring Illuminations: A Breathtaking New Experience!

April 4th to June 30th, 6:00pm - 10:00pm

This spring, experience the Zoo in a whole new light—after dark! Once the gates close for the day, stroll through a mesmerizing display of floral and animal-themed lanterns that illuminate the night. Plus, you can savor delicious Asian-inspired bites and sips as you take in the stunning sights. Your visit supports vital wildlife conservation efforts and the Zoo's mission to inspire a love for nature. Don't miss this enchanting after-ho- adventure!

#### Adult Prom: Disco Rodeo, a night to remember

Fri, May 2, 7:00pm - 11:00pm

Saddle up for a night to remember! Dust off your boots and shine up your sequins—it's time to hit the dance floor at Adult Prom! This year, the Zoo's Mansion House Porch is transforming into the ultimate mashup of glitter, groove, and giddy-up for a night of high-energy fun. Round up your herd and get ready to two-step and hustle under the disco lights, with music, classic prom traditions, and a dazzling mix of cowboy cool and funky flair that'll keep you dancing 'til the cows come home!

### Zoo Timings

The Zoo is open rain or shine! We are closed on Thanksgiving and Christmas Day, but open on all other holidays. Please visit the homepage and read ALERTS for any weather-related closing.

#### Regular Season Hours (March - December)

→ Daily: 10 AM – 4 PM



# Habitats



Filter by Category

All

Mammals

Birds

Reptiles



**Zoya**

Amur Tiger

Big Cat Forest



**Jamal**

Giraffe

Savannah Zone



**Debbie**



**Kiwi**



Home



Map



Events



Habitats

# Events



Filter by Category

All

Feeding

Talk

Tour

## Penguin Feeding

category

Join our keepers for a fascinating insight into how we care for and feed our colony of Humboldt penguins.



Daily



10:00 AM, 2:00 PM

## Tiger Talk

category

Learn about our tiger conservations efforts and watch these majestic animals during their active time.



Weekends



11:30 AM

## Reptile Encounter

category

Get up close with some of our friendlier reptiles in this hands-on educational session,



Wed,Fri,Sun



1:00 PM

## Elephant Bath Time

category

Watch our elephants enjoy their morning bath and learn about the special care these intelligent giants require.



Home



Map



Events



Habitats



# Habitats



Filter by Category



## Ziggy

Zebra

Mammals

Savannah Zone

### About

Ziggy loves running around with the herd and has a unique stripe pattern you can spot from afar.

### Conservation Status

Least Concern

### Feeding Times

10:30 AM and 3:30 PM



Home



Map



Events



Habitats



**Github Link:** <https://github.com/Illicitus25/Zoo-Explorer>