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Project-Cycle I: **Boongalu APP**

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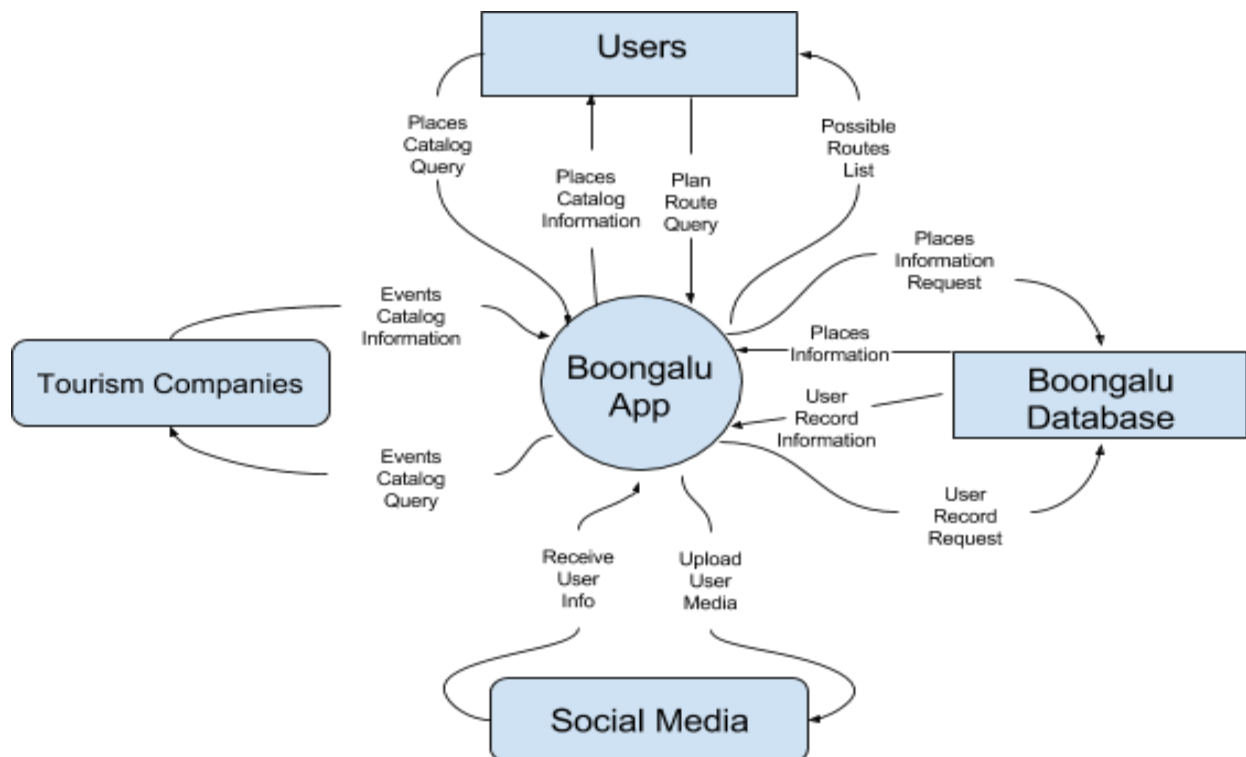
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Introduction

Boongalu is a tourism app that will allow the user to plan ahead of time a desired tour route unique to his predilection in the area of Porta del Sol (Westside of Puerto Rico). The main goal of the app is to provide the users with a tool to plan their domestic tourism inside a technology-free ambience such as parks, museums, rivers, hostelry, beaches, bars, restaurants, among others. It is focused on making it easier to create new experiences and discover new places. Therefore the app is directed to adventurous people that want to have fun and enjoy life to the fullest with friends and/or family.

Context Diagram



Functional Requirements

- **Essential Requirements:**

1. Show a list/map of places within a certain area or route such as museums, rivers, restaurants, bars, etc.
2. Should enable the user to select the desired destination(s) from available list in database.

3. The product shall give the user a suggested route based on music, age, mood preferences and desired area (one or more cities).
4. Show popular/favorite routes and places.
5. When the user starts a new route, the product shall offer the events available during the next 24 hours in the area selected.
6. The product shall display pictures of the places selected.
7. The system shall store user information such as name, favorite routes, favorite places.
8. The system shall store places information such as location, number(if necessary), menu, among others.
9. Allow the user to create routes based on the days that he will be staying near certain places.
10. Should let the user select the amount of hours that he/she wants to spend in a certain place.
11. Gives the user an estimate of the time(in hours) that he/she may spend in a place in order to keep in schedule with the previously selected time frame.
12. The user will be allowed to rate places in a scale from 1 to 5(1=horrible, 2=bad, 3=average, 4=good, 5=great).
13. Gives badges/trophies for completing certain tasks or visiting certain places.
14. Supports uploading of user media to social media platforms, for example: trophies, favorite routes, etc.
15. Should show social media activity of friends (from the past 30 days), such as shared photos, routes completed and given ratings.
16. Show average ratings of businesses, hostelry, museums, natural areas, among others registered on the products database.
17. Support use of GPS on user phone in order to show current position in a map.
18. Tracks user progress of selected route.
19. Keeps track of total mileage traveled (in miles) and visited places.
20. User can create a group (by inviting friends), which allows him/her to choose a route by the given preferences of the whole group.

- **Desirable Requirements:**

1. Should store routes and restaurant menus offline when desired.
2. Supports real-time visualization of other friends current location on map.
3. Supports route comparison (time, number of activities; for example: which one has more activities nearby, which one takes less time, etc.)
4. Show current month top 10 ranked places, according to user's ratings.
5. Allows to livestream current location(similar to periscope).
6. Shows recent crime activity news that have occurred in that area(past 15 days).
7. Show current weather forecast, such as temperature, rain probability.

8. Supports users ranking system based on routes completed: novice (5 or less), experienced (5 to 15), expert (16 or more).
9. Chat messaging system between users.
10. Show nearby ATM machines locations.
- **Optional Requirements:**
 1. Allows to choose between male/female voice for audio directions.
 2. Monthly restaurant dinner giveaway, to a random user.
 3. Show user of the month(user with most trophies earned during past month).
 4. Show new opening businesses in a weekly promotion(on Main Screen).
 5. Send weekly suggestions(as notifications) based on his favorite routes and preferences.

Non-Functional Requirements(4-3 ea)

- **Usability:**
 1. The system should take a minimum of 5 actions in order to have a route planned.
 2. Supports at least 2 languages(Spanish/English).
- **Reliability:**
 1. The system should not take more than 1 minute to launch in case of crashing.
- **Performance:**
 1. The stored data(routes, menus, images, personal info, etc) should not be larger than 100MBs.
 2. The system should not take more than 1 minute to search for places.
- **Interface:**
 1. App should interact with different social media(twitter, facebook), interact with tourism companies databases.
 2. *Boongalu* will have its own database, which will be kept up-to-date with user/business interaction and with other tourism companies databases.

Context:

- a. The system will interact with:
 - Android/iPhone devices
 - MySQL database software
- b. The system is focused on adult users, it will be simple in order to allow novice users to interact with the product easily.
- c. There are no laws or regulations that apply to this type of product.