





VAGA TRIP

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Internal Guide

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Outline



- Abstract
- Functionalities
- Background Work
- Technology & Methodology
- Database Design
- UML Diagrams

Some Facts about Travel Industry



According to the goodworklabs –

- It is the 7th most downloaded app category
- ❖ 85% use smart-phones to plan their travel when on leisure tours
- * 72% people will post photos about their travel on social platforms like Facebook
- ❖ 46% check-in via their smart-phones when on holidays
- ❖ 30% use mobile apps to find the best hotel deal
- ❖ 29% use mobile apps to find the best flight deals
- ❖ 15% users specifically download travel apps to plan a trip ahead

Abstract



The "last-minute cancellation" of a vacation is a true issue that many of us experienced while travelling. Finding a travel companion with comparable interests and a common language is difficult and stressful for an individual. Well, this software solution will help you solve the issue. I will be working on several discussed features which will be a part of a bigger product.

- ❖ The Application is using <u>Cloud API</u> that helps users for faster communication between Client GUI and server.
- The Application is to be hosted in <u>AWS Cloud</u>, for faster optimization and Scalablility
- ❖ In future our Application will be, one of <u>Travel Social Network</u> for tourists.





Search Destination

Search and select the destination u want to travel to.



Find Travel Partners

Browse through the list of trips, locals and nearby user in that location



Get Connected

When u find someone that you want to meet up with, click the connect button and start chatting with them



Trip Together

Plan together, Meet up with your travel companion at a pre-decided public place and travel together





Search Destination

Search and select the destination u want to travel to.





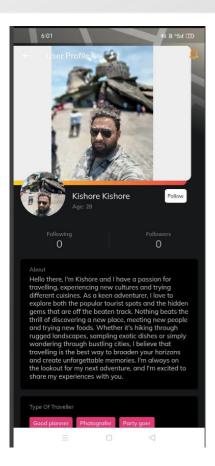




Find Travel Partners

Browse through the list of trips, locals and nearby user in that location









Get Connected

When u find someone that you want to meet up with, click the connect button and start chatting with them



In Message Box
User can communicate via

- ❖ Text
- Image Media
- Video Media
- Audio Media

Also can share audio, video, image and text

Also user can perform

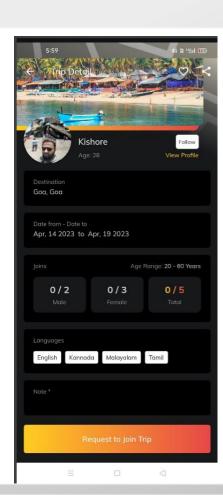
- ❖ voice call
- Video call





Trip Together

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Background Work - Literature Review,



1. "Design plays an important role in development"

Design plays a crucial role in the development of a user-friendly app. The design of an app affects the user's first impression, engagement, and overall experience with the app[2]. A well-designed app should be intuitive, easy to navigate, visually appealing, and accessible to all users.

Good design also helps in making an app more functional by ensuring that users can easily find and access the features they need. The use of consistent design elements such as color schemes, typography, and layouts can create a sense of familiarity and ease of use for users.

In addition, user testing during the design process can help identify usability issues and allow for improvements to be made before the app is launched. Ultimately, a user-friendly app can lead to higher user engagement, retention, and satisfaction, which can contribute to the success of the app.

2. "Always uptime" by AWS Cloud hosting

Amazon Web Services (AWS) provides a highly reliable cloud infrastructure that supports high levels of uptime for applications and services. AWS offers multiple availability zones (AZs) within each region, which are isolated data centers with their own power, cooling, and networking infrastructure. This architecture allows for redundancy and fault tolerance, ensuring that if one AZ experiences an outage, other AZs can continue to operate without interruption.[5]



In addition to AZs, AWS also offers a range of services and features that can help ensure high levels of uptime. For example, AWS Elastic Load Balancing automatically distributes incoming traffic across multiple instances to prevent overloading and improve availability. Overall, AWS provides a highly reliable cloud infrastructure that can help ensure uptime for applications and services.[5] By utilizing features such as multiple AZs, load balancing, auto scaling, and monitoring, developers can build highly available applications that are able to withstand unexpected events and maintain high levels of uptime.

3. "Faster optimization with API"

Node.js is a runtime environment that allows developers to build scalable and high-performance applications using JavaScript. Node.js also provides a built-in API that developers can use to create web servers, which can handle incoming requests and return responses. One reason why Node.js API can be faster than other traditional server-side technologies is its non-blocking I/O model. Node.js uses an event-driven architecture that allows it to handle many simultaneous connections without blocking the main thread of execution.[6] This means that requests can be processed more quickly and efficiently, leading to faster response times and overall performance. Additionally, Node.js API benefits from the ability to leverage JavaScript's asynchronous programming capabilities. By using asynchronous programming techniques, Node.js can handle multiple requests simultaneously without waiting for each request to complete before moving on to the next one[6]. This approach allows Node.js API to make more efficient use of server resources, resulting in faster and more responsive applications.

Technology





Figma & Flutter for Frontend UI



NodeJS and ExpressJS for API and Server



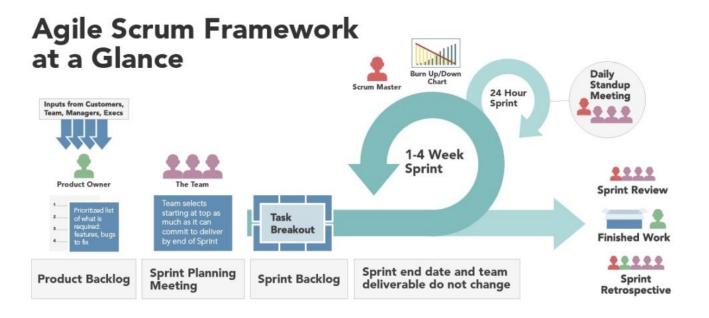
Database will be stored in MySQL



Application is hosted using AWS cloud

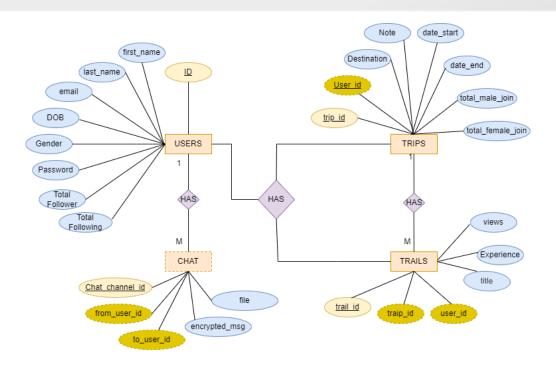
Methodology





Database Design

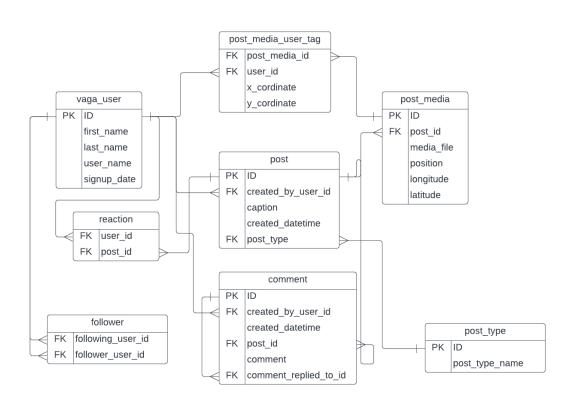






New Feature Database design "Post-Integration"





UML diagram

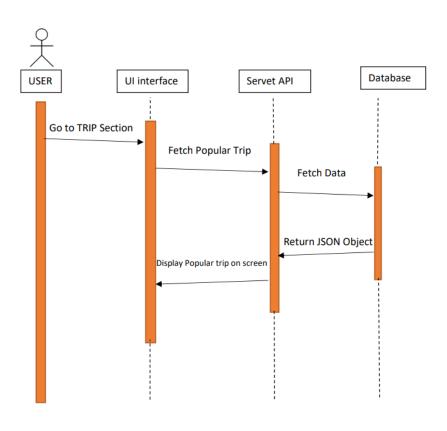




UML diagram is visually representing a Travel system along with its main actors, roles, actions, artifacts or classes.

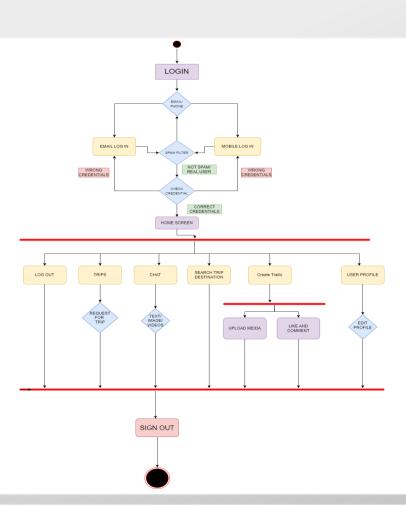
Sequence Diagram





Activity Diagram







Review 2 Suggestion Update

Comments:

- 1. Authentication
- 2. Registration

1. Authentication



Authentication in an app refers to the process of verifying the identity of a user who is trying to access the app or its resources.

This is typically done by requiring the user to provide some form of credentials, such as a username and password, or by using biometric factors like fingerprint or face recognition.

To have Authentication in our app, we have used four ways of Authentication which are

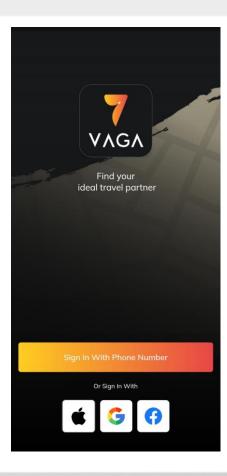
- 1. Mobile number (OTP based) WhatsApp, SMS
- 2. Google Account username and password credentials,
- 3. Facebook Account username and password credentials,
- 4. Apple Account username and password credentials,

By using this credentials, we can do Authentication of user in our app

Soon, In next update we have integrated biometric factors like fingerprint for Authentication process

1. Authentication









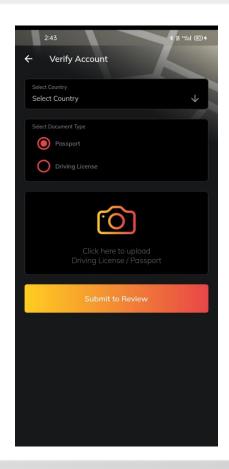
Registration in an app refers to the process by which a user creates an account or profile within the app.

This typically involves providing some personal information, such as a username, email address, and password, which will be used to identify and authenticate the user.

Steps to Register yourself as VAGA User in app

- 1. My profile
- 2. Verify my Profile
- 3. Upload document
- 4. Upload selfie
- 5. Enter proper Data as per documents
- 6. Verify email and number
- 7. Done
- 8. Soon you will get orange tick on profile

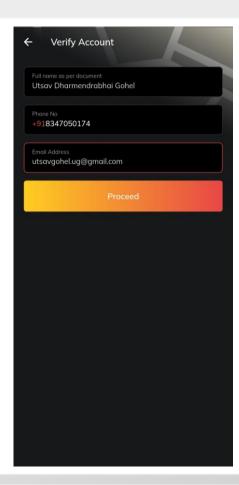


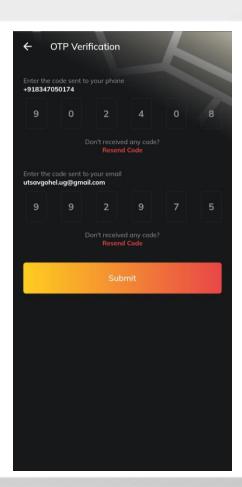


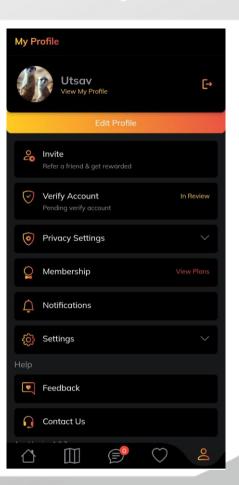




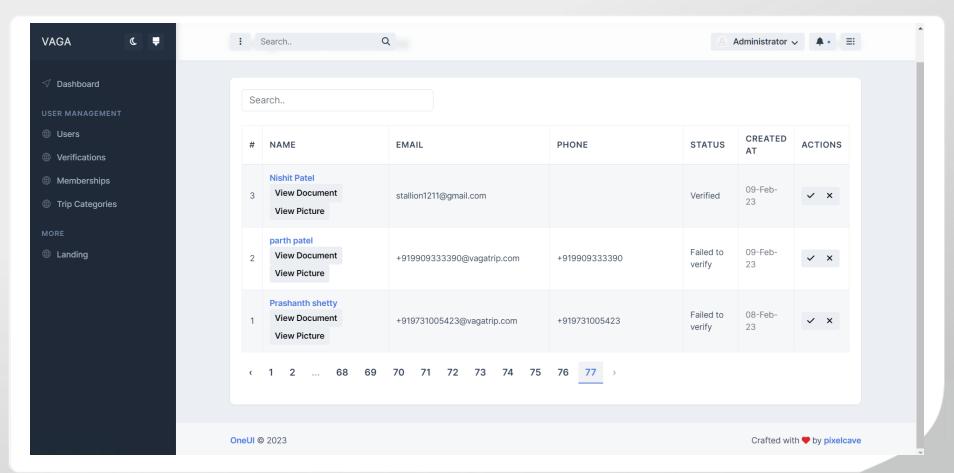












References



- [1] A. B. Yahaya, "A Distributed Information System for Tourists: A Case Study of Niger State Tourism Destinations," Master's thesis, unpublished, 2010.
- [2] "Literature Review," [Online]. Available: https://libguides.usc.edu/writingguide/literaturereview.
- [3] S. M. Abdulhamid and G. Usman, "Destination Information Management System for Tourist," arXivpreprint arXiv:1402.1243, 2014.
- [4] A. H. Agboola, A. J. Gabriel, E. O. Aliyu, and B. K. Alese, "Development Of A Fuzzy Logic Based Rainfall Prediction Model," International Journal of Engineering and Technology, vol. 3, no. 4, pp. 397-404, April 2013.
- [5] B. Wong, I. Stoyanov, and E. G. Sirer, "Octant: A Comprehensive Framework for the Geolocalization of Internet Hosts," in Proceedings of the Symposium on Networked System Design and Implementation, Cambridge, Massachusetts, April 2007.
- [6] L. Cao and F. Tay, "Financial Forecasting Using Support Vector Machines," Neural Comput & Application, vol. 10, pp. 184-192, 2001.
- [7] D. Li, J. Cheny, C. Guo, Y. Liu, J. Zhangy, Z. Zhang, and Y. Zhang, "IP-Geolocation Mapping for Involving Moderately-Connected Internet Regions," Technical Report, 2009.
- [8] D. Chatzopoulou and M. Kokkodis, "IP Geolocation," Computer Science and Engineering Dept UC Riverside Technical Report, 2007.
- [9] H. L. S. Berger and F. Lehner, "Location-based information services in the tourist industry," Journal of Information Technology & Tourism, vol. 5, pp. 243-256, 2003.
- [10] "What is Cloud Computing?" [Online]. Available: https://aws.amazon.com/what-is-cloud-computing/?nc2=h_ql_le_int_cc.

Find Buddy



