Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	16 October 2022
TeamID	PNT2022TMID33312
Project Name	News Tracker Application
Maximum Marks	4 Marks

Technical Architecture:
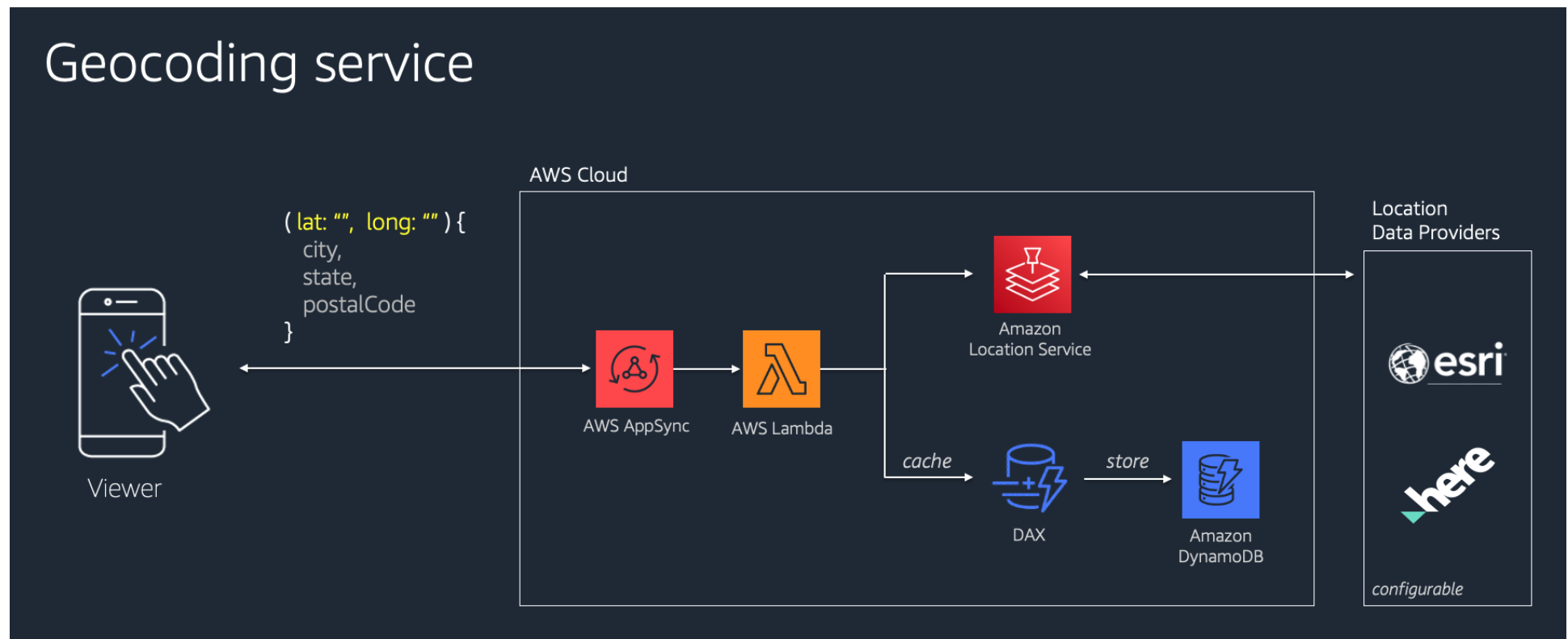
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User interacts with application with ease of use and most handy environment with minimum effort on user to receive maximum effort	HTML, CSS, JavaScript
2.	Application Logic-1	This application starts with login page where user sign up or sign in web application	Java / Python
3.	Application Logic-2	User enters personal data to update their Account profile where IBM watson stt service used to convert audio to text that is user can fill their detail by voice assistance	IBM Watson STT service
4.	Application Logic-3	User can view news content based on dates and places where chatbot is used there to filter content	IBM Watson Assistant
5.	Database	User data gets stored in database for lateral purposes	MySQL
6.	Cloud Database	Here Database Service are used in IBM DB2 .Using this users can access all the data stored in cloud through network from any accessible device	IBM DB2, IBM Cloudant
7.	File Storage	Users personal data and last visited news content are get stored in IBM block storage	IBM Block Storage
8.	External API-1	Application used IBM Weather to get exact weather report as it is one of the mandatory news content	IBM Weather API
9.	Infrastructure (Cloud)	Application Deployment on Cloud for faster and flexible performance over the internet	AWS Cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Here this application is light weight application using flask (python) as a backend development	Flask(Python)
2.	Security Implementations	Application contains user personal information, login credentials, transaction details are protected and kept confidential using data protection in IBM cloud	IAM in IBM cloud
3.	Scalable Architecture	Here application runs 24/7 as it is scalable where size is everything. so flask is used to perform web application quickly	Flask(Python)
4.	Availability	Application functions properly and will justified requirements .It can be accessible anytime	Technology used – Nginx, HaProxy, Avi Vantage Software LoadBalancer
5.	Performance	Application trace every request and building blocks efficiently for better performance	CPU Usage, Memory Usage,Latency and Up-Time