

# Project Design Phase

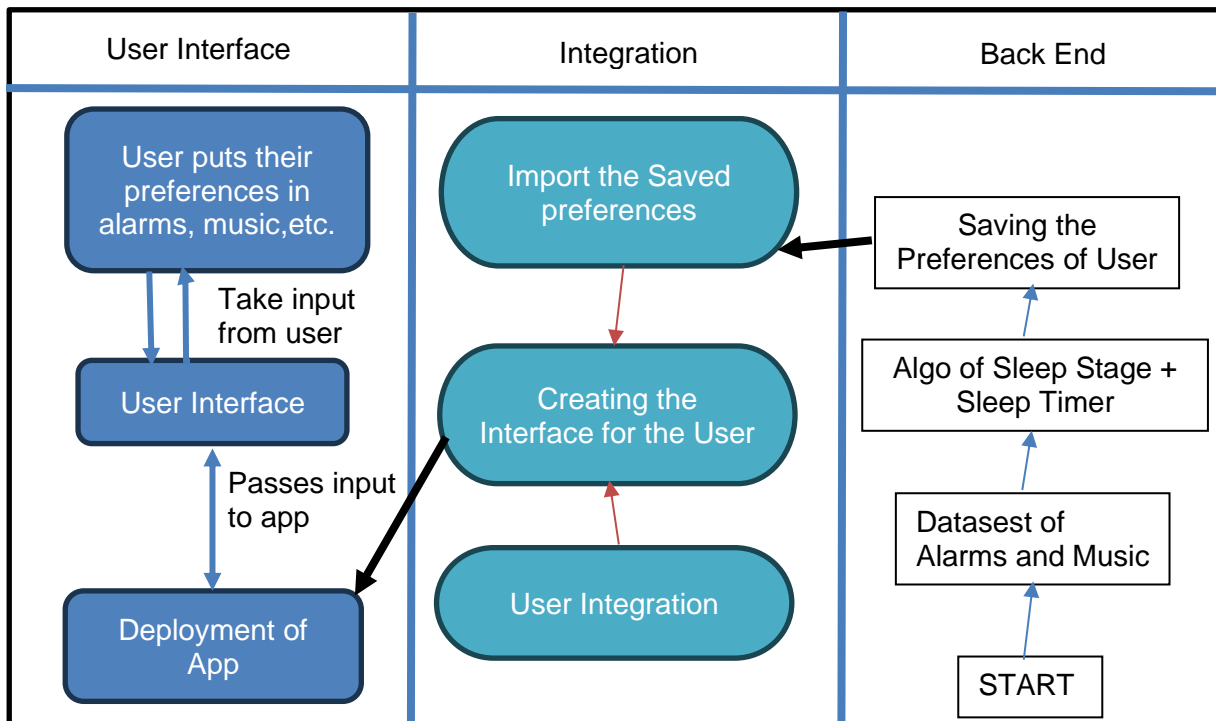
## Phase 4

### Technology Stack

Date	27 October 2023
Team ID	SI-GuidedProject-587558-1696963149
Project Name	A Sleep Tracking App For A Better Night's Rest
Maximum Marks	4 Marks

#### Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2



#### Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	(Mobile) Android App
2.	Application Logic-1	Logic for a process in the application (Sleep Tracking)	Kotlin / JetpackCompose
3.	Application Logic-2	Logic for a process in the application (Sleep Stage Tracker)	JavaScript
4.	Application Logic-3	Logic for a process in the application (Smart Alarm)	JavaScript
5.	Database	Data Type, Configurations etc. (For Alarms and Music)	NoSQL
6.	Cloud Database	Database Service on Cloud	For future iterations
7.	File Storage	File storage requirements	Local Filesystem

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	e.g. SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Technology used
4.	Availability	Justify the availability of application (e.g. use ofload balancers, distributed servers etc.)	Technology used
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used