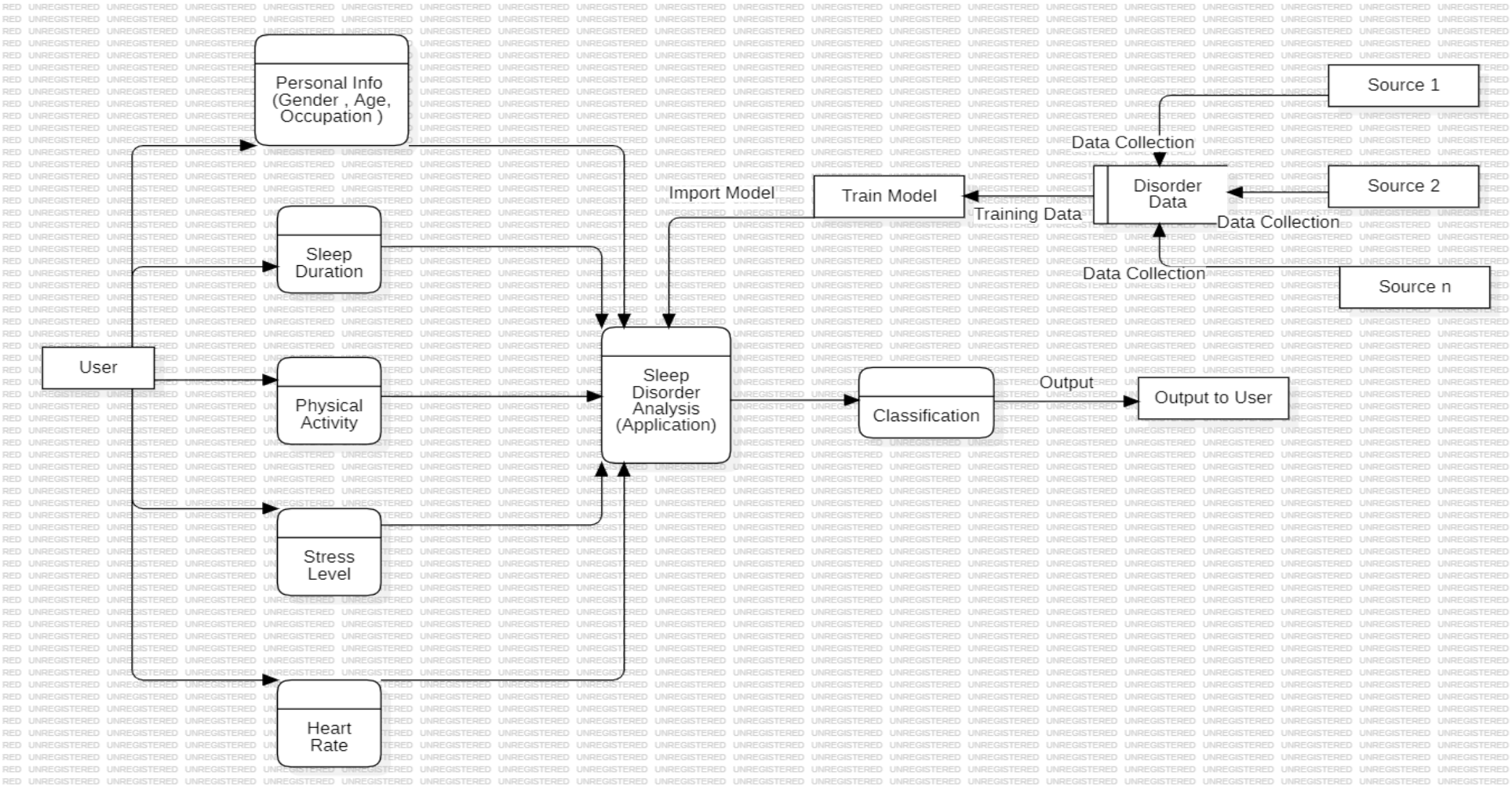
Project Design Phase-II
Data Flow Diagram & User Stories

Date	4 November2023
Team ID	Team-593059
Project Name	The Sleep Oracle Anticipating Health and Lifestyle Through Data
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

DFD Level 0 (Industry Standard):



User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Individual	Data Collection and Sleep Pattern Analysis	USN-1	As an Individual, I want to input my sleep-related data into the Sleep Oracle system, including sleep duration, quality, and lifestyle factors, to receive personalized insights about my sleep patterns.	- The system should provide an interface for entering sleep data. - Users should be able to input information such as sleep duration, sleep quality, physical activity, stress level, and lifestyle factors. - The system should validate and store user data.	High	Sprint-1
Individual	Personalized Recommendations	USN-2	As an Individual, I expect the Sleep Oracle system to analyze my sleep data and provide personalized recommendations for improving my sleep quality and well-being.	- The system should process the user's sleep data to generate recommendations. - Recommendations should be tailored to the user's specific sleep patterns and lifestyle.	High	Sprint-3

				- The system should provide actionable insights for better sleep.		
Individual	Sleep Disorder Alerts	USN-3	As an Individual, I want the Sleep Oracle system to detect potential sleep disorders based on my sleep data and provide alerts, prompting me to seek medical advice if necessary.	- The system should employ machine learning models to analyze sleep data for potential sleep disorders. - If a potential sleep disorder is detected, the system should notify the user and recommend consulting a healthcare professional. - Clear information about potential sleep disorders should be provided.	Medium	Sprint-3
Healthcare Professionals	Access to Sleep Data	USN-4	As a Healthcare Professional, I need secure access to sleep data collected by the Sleep Oracle system to assist in diagnosing and treating sleep disorders in patients.	- The system should provide authorized healthcare professionals with access to user sleep data. - Data should be securely stored and transmitted to ensure privacy. - Access should be compliant with relevant data protection regulations.	High	Sprint-2

Healthcare Professionals	Diagnostic Support	USN-5	As a Healthcare Professional, I expect the Sleep Oracle system to provide valuable insights and potential sleep disorder indicators based on user sleep data, assisting me in diagnosing sleep-related conditions.	- The system should analyze sleep data to identify potential sleep disorders. - Relevant information and insights should be presented to healthcare professionals. - The system should be equipped with tools for diagnosis support.	High	Sprint-3
Researchers	Access to Anonymized Data	USN-6	As a Researcher, I require access to anonymized and aggregated sleep data from the Sleep Oracle system to conduct sleep health research.	- The system should provide researchers with access to anonymized and aggregated sleep data. - Data should be de-identified and privacy-compliant.	Medium	Sprint-2
Researchers	Data Analytics	USN-7	As a Researcher, I aim to explore and analyze sleep data from the Sleep Oracle system to gain insights into sleep patterns and health trends.	- The system should offer tools and data analytics capabilities for researchers to explore sleep data. - Researchers should be able to extract meaningful insights from the data.	Medium	Sprint-4

Mobile App Users	User-Friendly Mobile App	USN-8	As a Mobile App User, I expect the Sleep Oracle mobile application to be user-friendly and accessible, allowing me to input my sleep data and receive recommendations effortlessly.	- The mobile app should have an intuitive and user-friendly interface. - Users should be able to easily enter their sleep data. - Recommendations should be presented in a clear and understandable manner.	High	Sprint-5
Mobile App Users	Data Sync Across Devices	USN-9	As a Mobile App User, I want my sleep data and recommendations to synchronize seamlessly across multiple devices, ensuring a consistent experience.	- The mobile app should support data synchronization across various devices. - Users should access their sleep data and recommendations regardless of the device they use. - Data should be securely stored and transmitted.	Medium	Sprint-6
Data Administrator	Data Management Tools	USN-10	As a Data Administrator, I require efficient data management tools to maintain and secure the sleep data collected by the Sleep Oracle system.	- The system should provide data administrators with tools for data maintenance and management. - Data management tools should include data validation, backups, and security measures.	High	Sprint-6

				- Data administrators should have the capability to manage user profiles and access levels.		
System Administrators	Scalability and Performance	USN-11	As a System Administrator, I need the Sleep Oracle system to be scalable and optimized for high performance to accommodate increasing user loads.	As a System Administrator, I need the Sleep Oracle system to be scalable and optimized for high performance to accommodate increasing user loads.	High	Sprint-7