Project Design Phase-II
Data Flow Diagram & User Stories

Date	21 October 2022
Team ID	PNT2022TMID47693
Project Name	Project - IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	4 Marks

Data Flow Diagrams:

FLOWS:

1.Connecting IoT devices to the Watson IoT platform and exchanging the sensor data.

2.The GPS coordinates of the child location will be sent to the IBM IoT platform

3.Creates a database in Cloudant DB to store location data.

4.Develop a web Application using Node-RED Service.

5.The web application will check if the child is inside or outside the geofence

6.Notifies and alerts the parents if the child goes out of the geofence.
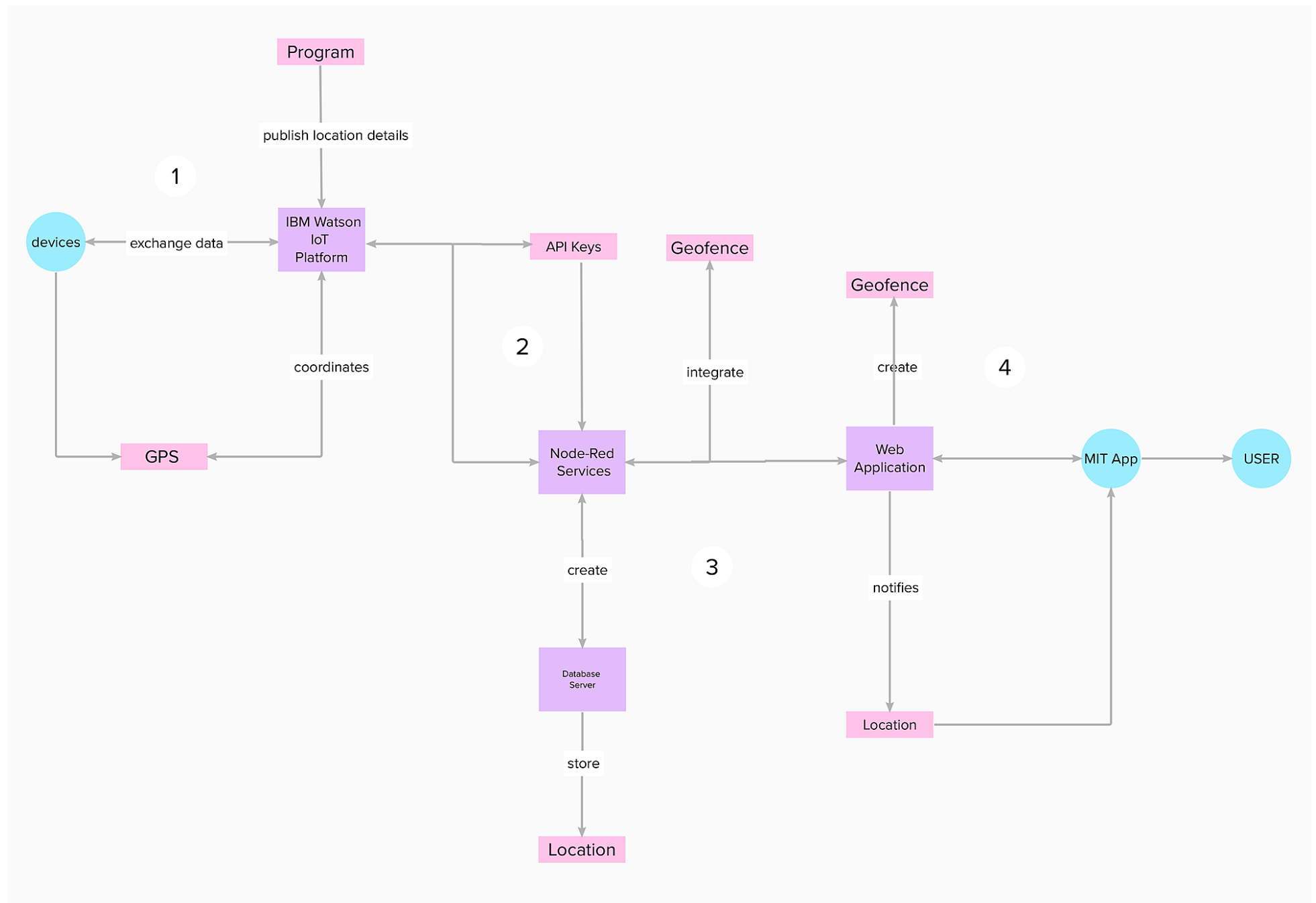
Program

publish location details

1

devices →← exchange data → IBM Watson IoT Platform →← API Keys

Geofence

Geofence

create

4

coordinates

integrate

2

GPS

Node-Red Services → Web Application →← MIT App → USER

create

3

notifies

Database Server

Location

store

Location

Location

User Type	Functional Requirement	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-4
		USN-2	As a user, I will receive a confirmation email once I have registered for the application	I can receive confirmation email & get confirmed	High	Sprint-4
		USN-3	As a user, I can register for the application through browser	I can register & access the dashboard with Google Sign in	Low	Sprint-4
		USN-4	As a user, I can register for the application through Gmail	---	Medium	Sprint-4
	Login	USN-5	As a user, I can log into the application by entering email & password	---	High	Sprint-4
	Dashboard	USN-6	As a user,I can see the desired information on the screen of the phone	I can access my screen	High	Sprint-2
Customer (Web user)	Users	USN-1	As a user, I can integrate all users in this account	I can configure the account, active and inactive	Medium	Sprint-2
	Web applicator	USN-2	As a web applicator, I can form backend server	I can progress the code in the server	Medium	Sprint 3
Customer Care Executive	Security	USN-1	As a customer care, I can secure the data in cloud database	I can secure the data location	High	Sprint-3
Administrator		USN-1	As a user,I can manage the application	I can configure the settings their account.	Medium	Sprint-3
Devices	Simulation	USN-1	As a user, I can connect the required parameter in device.	I can deliver the product	High	Sprint-1
		USN-2	As a user, I can activate the device	I can applicable to the child devices	Medium	Sprint-1
Message Sender	API requests	USN-1	As a message sender, API requests whenever some function is invoked from a device.	I can send or receive the from an application.	High	Sprint-2
	Fast SMS	USN-2	As a sender, I can send bulk messages using the sms	I can receive the messages in device	Low	Sprint-3
Programmer	Software	USN-1	As a programmer, I can ceate the user	To configure the devices	High	Sprint-2

User Type	Functional Requirement	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
			friendly program for ease access by parents			
		USN-2	As a software, I compute coding in devices	To simultaneously run the device	High	Sprint-2
Authenticator	User	USN-1	As a user, I can use identification technique in IoT device	I can emminent the security	High	Sprint-3
	Open Authorization	USN-2	As a user, I uses an open standard communication protocol	It provides tokens to the end users	Medium	Sprint-3
	Identifier	USN-3	User successfully register into the system	It stores the user's unique identification	Medium	Sprint-2
Admin	Admin Authorities	USN-1	In this other end-users are restricted	to add devices into the system	Low	Sprint-4
	User	USN-1	As a user, I can create organizations	The user to login to IoT Platform	High	Sprint-2
		USN-2	As a user, I allows admin to create & edit user accounts	For assigning access rights to user or device group	Medium	Sprint-2