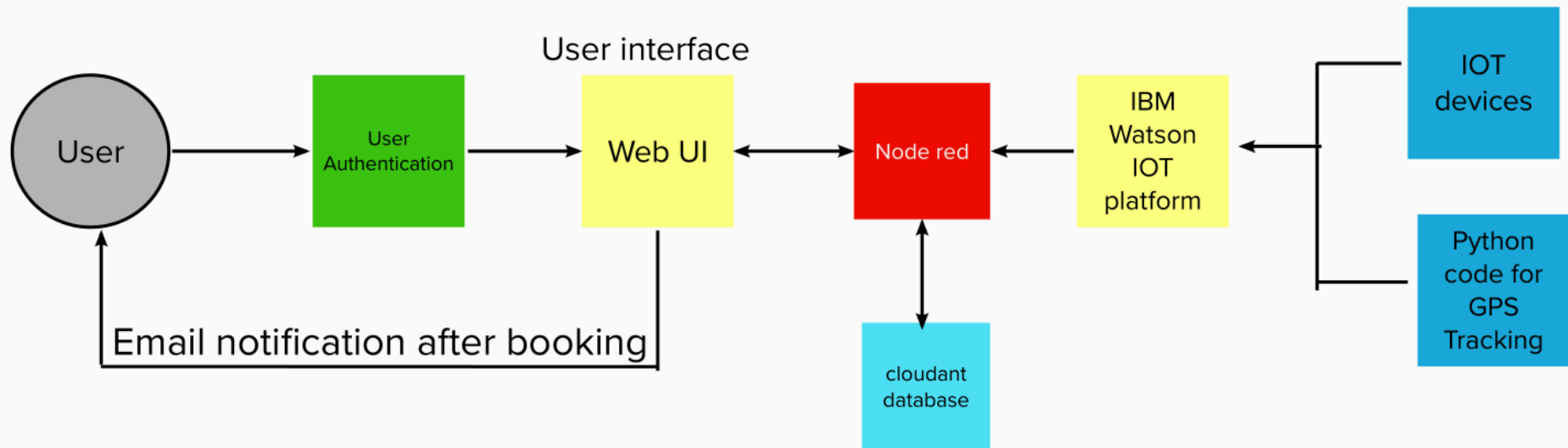


**Project Design Phase-II**  
**Technology Stack (Architecture & Stack)**

Date	22 October 2022
Team ID	PNT2022TMID06140
Project Name	Project – Smart Solution for railways
Maximum Marks	4 Marks

## Technical architecture:



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

<b>S.No</b>	<b>Component</b>	<b>Description</b>	<b>Technology</b>
1.	User Interface	Web UI/app	Python
2.	Application Logic	Logic for a process in the application	Python
3.	NodeRed	Content in UI	Node.js
4.	Cloud Database	Database Service on Cloud	IBM Cloudant
5.	File Storage	File storage requirements and rapid visualization	IBM Watson IOT Platform
6.	External API-1	For GPS tracking ,latitude and longitude information.	Open Weather API
7.	External API-2	Customer feedback	Hivemq
8.	Infrastructure (Server / Cloud)	Application Deployment on Cloud	Cloud Foundry

**Table-2: Application Characteristics:**

<b>S.No</b>	<b>Characteristics</b>	<b>Description</b>	<b>Technology</b>
1.	Open-Source Frameworks	Quick development of APIs	Django
2.	Security Implementations	To hide process information	AES 256 encryption algorithm
3.	Scalable Architecture	GPS tracking	Python with request module
4.	Availability	Always available website	React
5.	Performance	Instantaneous response	Advanced HTML and CSS