Project Design Phase-II TechnologyStack(Architecture&Stack)

Date	17October2022
TeamID	PNT2022TMID11759
ProjectName	SmartWasteManagementforMetropolitanCities
MaximumMarks	4Marks

TechnicalArchitecture:

USERIBMWATSONSERVICEADMIN

CLOUD DB

GPS GSM Network

BROWSER UIRasberrypi

Table-1:Components&Technologies:

S.No	Component	Description	Technology

1.	UserInterface	WebUI,MobileApp.	HTML,CSS,JavaScript
2.	ApplicationLogic-1	Logicforaprocessintheapplication	Python
3.	ApplicationLogic-2	Logicforaprocessintheapplication	IBMWatsonSTTservice
4.	ApplicationLogic-3	Logicforaprocessintheapplication	IBMWatsonAssistant
5.	Database	DataType,Configurationsetc.	MySQL,
6.	CloudDatabase	DatabaseServiceonCloud,tostoredata	IBMDB2,IBMCloudant
7.	FileStorage	Filestoragerequirements,Toretrievedata	IBMBlockStorage
8.	MachineLearningModel	Torecognizethethings	ObjectRecognitionModel
9.	Infrastructure(Server/Cloud)	LocalServerConfiguration:MAMP CloudServerConfiguration:CloudConfigServer	Local,CloudFoundry

Table-2:ApplicationCharacteristics:

S.No	Characteristics	Description	Technology
1.	Open-SourceFrameworks	Providespermissiontousethesourcecode	IBMCloud
2.	SecurityImplementations	Sendsalerttotheadminoncethebingetfilled	UI
3.	ScalableArchitecture	Ensuresthatproductaremadetoberecycledback	IBMWatsonPlatform
4.	Availability	Directsthetruckdriverstopre-decideroutes.	RealTimeGPS,CloudServer
5.	Performance	Measureddataissendtothecloud,Trashiscollectedbasedonthat.	IOT