

UNIVERSITY OF SARGODHA  
DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

Capstone Project 2019-20

BSCS 7<sup>th</sup> Regular

PROJECT IMPLEMENTATION PLAN

Sr.	Milestone Detail	Outcome	Project %	Roll #	Member's Contribution	Learning Outcome	Viva
1	<i>Implementation on structure of Arduino Mega using Arduino IDE and blinking the led.</i>	Blinking of led	3%	BSCSF16M016	Coding	Learning of Arduino development	
				BSCSF16M049	Installation	Learning of Arduino development	
2	<i>Build the features required on LCD of the system and its interface.</i>	LCD interface	10%	BSCSF16M016	Coding, Connections	Coding on Arduino IDE	
				BSCSF16M049	Connections	Coding on Arduino IDE	
3	<i>Implementation on PIR motion sensor module that will detect motion of intruders</i>	Detection of motion	20%	BSCSF16M016	Coding, Connections	Learning about module of motion	
				BSCSF16M049	Coding	Learning about module of motion	
4	<i>Further implementation on PIR Sensor</i>	Detection of Motion	25%	BSCSF16M016	Coding	Motion Detection through sensor	
				BSCSF16M049	Coding	Motion Detection through sensor	
5	<i>Keypad Implementation on the Arduino Mega</i>	Each press of key will be captured as values	35%	BSCSF16M016	Coding, Connections	Learn about taking inputs through keypad	
				BSCSF16M049	Coding	Learn about taking inputs through keypad	

Team

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6	<i>Working on IR flame detection module with working on its features that will detect flames</i>	Detection of Flames	40%	BSCSF16M016	Coding, Connections	Learning about module of Flame detection	
				BSCSF16M049	Coding	Learning about module of Flame detection	
7	<i>Further implementation on IR flame detection Sensor</i>	Detection of Flames	45%	BSCSF16M016	Coding	Flames Detection through sensor	
				BSCSF16M049	Coding	Flames Detection through sensor	
8	<i>Working on Gas sensor that will detect Gas leakage for the system, for this purpose we will make implementation on MQ2 sensor</i>	Detection of gas leakage	50%	BSCSF16M016	Coding, Connections	Learning about module of Gas detection	
				BSCSF16M049	Coding	Learning about module of Gas detection	
9	<i>Further implementation on MQ2 sensor</i>	Detection of gas leakage	55%	BSCSF16M016	Coding	Gas Detection through sensor	
				BSCSF16M049	Coding	Gas Detection through sensor	

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10	<i>Working on GSM module and all the commands it requires for its working on registration of users</i>	Source of sending and receiving data or signals	60%	BSCSF16M016	Installation, Connections	Learning about GSM Sim 900 Module	
				BSCSF16M049	Installation	Learning about GSM Sim 900 Module	
11	<i>Sim card Installation on GSM module and sending and receiving messages through the system</i>	A message to be sent to the user incase of emergency	70%	BSCSF16M016	Coding, Installation	Learn about way of sending and receiving messages	
				BSCSF16M049	Coding	Learn about way of sending and receiving messages	
12	<i>Authentication phase that includes pin code verification</i>	Identification of users	80%	BSCSF16M016	Coding	Learn about authentication phase	
				BSCSF16M0049	Coding	Learn about authentication phase	
13	<i>Implementation on change of registered numbers on the GSM module and</i>	Registration of people	85%	BSCSF16M016	Coding	Learn about Security measures	
				BSCSF16M049	Coding	Learn about Security measures	

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	<i>add or delete neighbors mobile numbers</i>						
14	<i>Building an alarm system that will ring on unwanted situations</i>	A system that will ring for the user on the required time	90%	BSCSF16M016	Coding, Connections	Learn about ringing of alarm on the required situation	
				BSCSF16M049	Coding	Learn about ringing of alarm on the required situation	
15	<i>By using Jumper cables and breadboard build the system as a whole</i>	A well structured system that will contain all the modules	95%	BSCSF16M016	Connections	Learn about circuit making	
				BSCSF16M049	Connections	Learn about circuit making	
16	<i>Designing a module to place all of our implementation in a well designed structural system</i>	A complete system that will have all the requirements of our system	100%	BSCSF16M016	Designing, Installation	Learn about designing a system	
				BSCSF16M049	Designing, Installation	Learn about designing a system	

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