PROJECT IMPLEMENTATION PLAN

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| Sr. | Milestone Detail | Outcome | Project % | Roll # | Member’s Contribution | Learning Outcome | Viva |
| 1 | Design of user interface for registration and login | Signup and login page | 5% | BSCSF16E034 | Signup and login Page Design | Front-end android and its development |  |
| BSCSF16E030 | Signup and Login Page Design | Front-end android and its development |  |
| BSCSF16E052 | Signup and login page Java | Front-end android and its development |  |
| 2 | Design of user interface for wheelchair application form | Application form to request for wheelchair | 10% | BSCSF16E034 | Application form to request for wheelchair Design | Complete Design of Application Form |  |
| BSCSF16E030 | Application form to request for wheelchair Code | Complete Functioning Application Form for Wheel Chair |  |
| BSCSF16E052 | Application form to request for wheelchair Documentation | Application Form Working methodology |  |
| 3 | Design of user interface for wheelchair movement functionality | Display of directions to control wheelchair’s movement | 20% | BSCSF16E034 | Design the Complete interface | Interface of Movement functions |  |
| BSCSF16E030 | Documentation of interface Working | Working Methodology |  |
| BSCSF16E052 | Movement interface Coding | Complete Functioning Interface connected with Microcontroller |  |
| 4 | Creation of Database for our application | Database | 30% | BSCSF16E034 | Database Creation and management | Learning of firebase |  |
| BSCSF16E030 | Database setting and managment | Complete working of database managment |  |
| BSCSF16E052 | Documenting the data | learning of queries |  |
| 5 | Make wheelchair moveable electrically and mechanically | Wheelchair will become movable | 35% | BSCSF16E034 | Arduino coding to make it workable | Complete Functioning Interface connected with  Arduino |  |
| BSCSF16E030 | Embed suitable motors design  Implementation | Learning about circuits and mechanical structure |  |
| BSCSF16E052 | Document working modules | Knowledge of complete interface and working methodology of modules |  |
| 6 | Make wheelchair moveable electrically and mechanically | Wheelchair will become movable | 40% | BSCSF16E034 | Code and covert Arduino in working state | Knowledge about complete functioning hardware (Arduino) |  |
| BSCSF16E030 | Document working of Arduino and motor | Learning about electronics, mechanics and methodology |  |
| BSCSF16E052 | Connectivity of motor with batteries make it workable | Complete Functioning of electronics and mechanics  used |  |
| 7 | Make wheelchair moveable electrically and mechanically | Wheelchair will become movable | 45% | BSCSF16E034 | Documentation of modules working methodology | Knowledge about electronic and mechanics working and methodology |  |
| BSCSF16E030 | Code to make motor speed controllable | Complete Functioning connection with Microcontroller |  |
| BSCSF16E052 | Embed suitable controller design implementation | Awareness of connection of electronics. |  |
| 8 | Control wheelchair movement speed | Speed becomes controllable | 50% | BSCSF16E034 | Design and arrangement of microcontrollers | Knowledge about microcontrollers |  |
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| BSCSF16E030 | Code Microcontroller for controlling interface | Knowledge about microcontrollers concepts and coding functionality |  |
| BSCSF16E052 | Documentation the working of module | Learning about complete working methodology of module |  |
| 9 | implement **move right** functionality into wheelchair and connect it to smartphone | Wheelchair will able to move in right direction | 55% | BSCSF16E034 | Design Application connection with wheelchair embedding Bluetooth module | Knowledge of connecting devices through Bluetooth module |  |
| BSCSF16E030 | Documentation of working interface of move right functionality | Knowledge of working of devices through Bluetooth module |  |
| BSCSF16E052 | Coding of Application connection with wheelchair | Complete Functioning Interface connected with  Bluetooth |  |
| 10 | implement **move right** functionality into wheelchair and connect it to smartphone | Wheelchair will able to move in right direction | 60% | BSCSF16E034 | Designing for connection of smartphone with chair through Bluetooth | Knowledge of connecting devices through Bluetooth module |  |
| BSCSF16E030 | Code to move wheelchair in right direction | Learning of Bluetooth module coding concepts |  |
| BSCSF16E052 | Documentation of functionality and working of module | Knowledge of working of devices through Bluetooth module |  |
| 11 | implement **move left** functionality into wheelchair and connect it to smartphone | Wheelchair will able to move in left direction | 70% | BSCSF16E034 | Documentation of Complete Functioning Interface | Knowledge of working of devices through Bluetooth module |  |
| BSCSF16E030 | Design Application connection to move toward left with wheelchair embedding Bluetooth module | Knowledge of working of devices through Bluetooth module |  |
| BSCSF16E052 | code for connection of smartphone to move towards left | Knowledge of connecting devices through Bluetooth module in various directions |  |
| 12 | implement **move forward** functionality into wheelchair and connect it to smartphone | Wheelchair will able to move in **forward** direction | 80% | BSCSF16E034 | Documentation of working and methodology used | Aware of working devices through Bluetooth module |  |
| BSCSF16E030 | Design interface with upward movement functionality | Learn functioning if module |  |
| BSCSF16E052 | Coding for connecting mobile app interface with forward direction | Knowledge of connecting devices through Bluetooth module |  |
| 13 | implement **move reverse** functionality into wheelchair and connect it to smartphone | Wheelchair will able to move in **reverse** direction | 85% | BSCSF16E034 | Coding for connecting mobile app to move chair in reverse direction | learning of implementation of various direction functionality |  |
| BSCSF16E030 | Documentation of working method of module | Knowledge of function and connection of module |  |
| BSCSF16E052 | Designing for connection of smartphone with module in reverse direction | Knowledge of working of module |  |
| 14 | implement **move reverse** functionality into wheelchair and connect it to smartphone | Wheelchair will able to move in **reverse** direction | 90% | BSCSF16E034 | Designing for connection of smartphone with module in backward | Knowledge of connecting devices through Bluetooth module |  |
| BSCSF16E030 | Coding for connecting mobile app interface with reverse direction | Complete functioning of module with reverse direction |  |
| BSCSF16E052 | Documentation of working of module in backward direction | Knowledge of connecting devices through Bluetooth module |  |
| 15 | Android phase: Back End coding (add movement functionality ) | Complete Mobile Application | 95% | BSCSF16E034 | Java functionality coding Test | Learning java |  |
| BSCSF16E030 | Complete Design Checking | Knowledge about java |  |
| BSCSF16E052 | Documentation of interface with complete working | Knowledge about java  Its working and methodology |  |
| 16 | Android phase: Back End coding (add movement functionality ) | Complete Moveable Wheel Chair | 100% | BSCSF16E034 | Complete Documentation review | Knowledge about complete working |  |
| BSCSF16E030 | Coding of devices checking | Knowledge about complete working |  |
| BSCSF16E052 | Coding and Designing of smartphone app check | Knowledge about complete working |  |