**Title : Multiple Language Display Unit (Wireless Display Unit)**

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**Group members:** 1) Ashlesh Khajbage ………………2) Aditi Dorle …………………………………………………

3) Akhil Rane …………..……………………………………. 4)…………………………………………………………………….

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| **Tools required** | **Testing possibility** | **Controller** | **Cost** |
| **Hardware/components**  **LEDs**  **Bluetooth Module / ESP2866**  **MAX7219**  **Resistors**  **Perforated Board** | **Hardware**  **Yes**  **Yes**  **Yes**  **Yes**  **No(unless clock input req)**  **No**  **No** | **Arduino**  **Or**  **PIC18F4550**  **(whichever support communication feasible)** | **ESP2866 – 200/-**  **Boards,LEDs- 260/-**  **MAX7219(6) -1080/-**  **Resistors -6/-**  **SolderingWire-80/-**  **Wire -36/-** |
| **Software**   * **MATLAB IDE** * **Arduino IDE** * **Proteus** * **Eagle** * **Fusion 360** | **Software**  **Yes**  **yes**  **yes**  **yes (at least on 1 pc)** |  |  |
| **Tools available within campus or outside** | **Sensors required** | **Signal conditioning if any** |  |
| **-Soldering gun**  **-dc power supply unit** | **-nil** | **-3.3V signal Conditioning**  **OR**  **-separate power supply** | **- 50/-** |
| **Applications if any** | **PCB design and fabrication** | **Datasheets/ application notes available** |  |
| * **Railway stations,** * **Airports** * **Colleges And Schools** * **Bus-stops and any other public places.** * **Public transport** | * **Controller circuit** * **Led Matrix** * **Power supply (5V and 3.3V)** * **Daughter Board** | * **Arduino/PIC18F** * **Decade counter(4017)** * **Transistors (2N3904)** * **MAX7219** | **Estimated**  **Cost**  **Led matrix -1500/-**  **Max-driver – 360/-**  **Arduino board- 400/-** |
| **Mechanical design** | **Enclosure design** | **Demonstration** |  |
| * **Rectangular Box**   **Signature of Guide** | * **Wooden Enclosure** |  |  |