

ABSTRACT

Nowadays there have been many technological advancements that have fulfilled human needs in daily activities, all of which cannot be separated from the development of science, one example of Islamic worship is the time viewer that indicates information on the beginning of prayer time with LED (Light Emitting Diode) display arranged into 7-Segment. Determining the beginning of prayer times in an area has its own policy in using the method of determining the beginning of prayer times. Making an agreement on the prayer time schedule is not easy, because it is influenced by several subjectivity factors, the validity period and the limited astronomers. Therefore, a digital prayer schedule is designed with the Self Setting system, which is meant by this self setting, the tool will work / change automatically when the device is in a certain location. The tool will adjust the schedule of prayer schedules in the area, this tool is supported by a GPS (Global Positioning System) system. Display on the 7-segment in the form of location coordinates, Hours, Minutes, Date, Month, Year, Shubuh, Dzuhur, Asr, Maghrib and Isha. Hardware is designed using a microcontroller that is given the ability to communicate with GPS (Global Positioning System) which will be connected to the prayer schedule so that it can display prayer times in real time and according to the schedule in the desired area. The expected results are able to make the Digital Prayer Schedule accurate and accurate so that it can be used as a reference in worship.

Keyword : GPS, 7-Segment, Prayers Schedule