

## ABSTRACT

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Eyes is an important things for people, people can doing a many kind of activities but not all people have a normal eyes . People who can't see is called visually impaired people. Visually impaired people usually using regular stick for doing activities but they don't have any censor. Based on that things, so in this final project developed a things called SMART GUIDE EXTENSION who can detect compass direction with the sound output and obstacle and holes detection. SMART GUIDE EXTENSION comprise of two modules, include compass direction and obstacle and holes detection. In this final project will discussed more detail about compass direction. Compass direction is only active when the button is pressed. Module compass direction using CMPS11 as compass , DFPlayer as output , Arduino Uno as main control sytem. Module compass direction using CMPS11 as compass , DFPlayer Mini as output system, Arduino Uno as main control sytem and power bank 3000mAh as power provider. From the result of questionnaires, user friendly is value for 76 percent.

Keys: Visual Impaired People, SMART GUIDE EXTENSION, CMPS11, DFPlayer.