Abstract

In modern life, smart devices are needed by humans. There is a lot of work for parents to do, the need for parents to supervise children remotely is getting higher. Parents need a tool to supervise and communicate with their children, so that children do not feel alone when parents are doing homework. However, currently the devices on the market are not capable of 2-way video communication.

From these problems, the authors propose a more affordable video conferencing technology to connect parents with their toddlers. According to the author, with video conferencing parents can monitor their toddler's behavior, on the other hand, toddlers can also see their parents. So, the toddler also feels comfortable and safe because he sees his parents, even from behind the scenes. So the authors present a prototype called "Harvie" at an affordable price to meet these needs.

In this final project, the writer designed a baby monitoring that can be used for 2-way communication. Testing this device using a Raspberry Pi 3 device installed with jitsi meet. The results of this test show positive results, when doing 2-way communication the device meets the Quality of Service standards according to THIPON standards. After conducting the test, the author also conducted a market survey. The market survey was filled by 105 respondents, 80% of whom did not understand about baby monitoring. However, 80% of respondents also agreed that parents need this device to supervise their children.

keywords: video conference, smart home video conference, baby monitoring, Jitsi meet, Quality of Service