

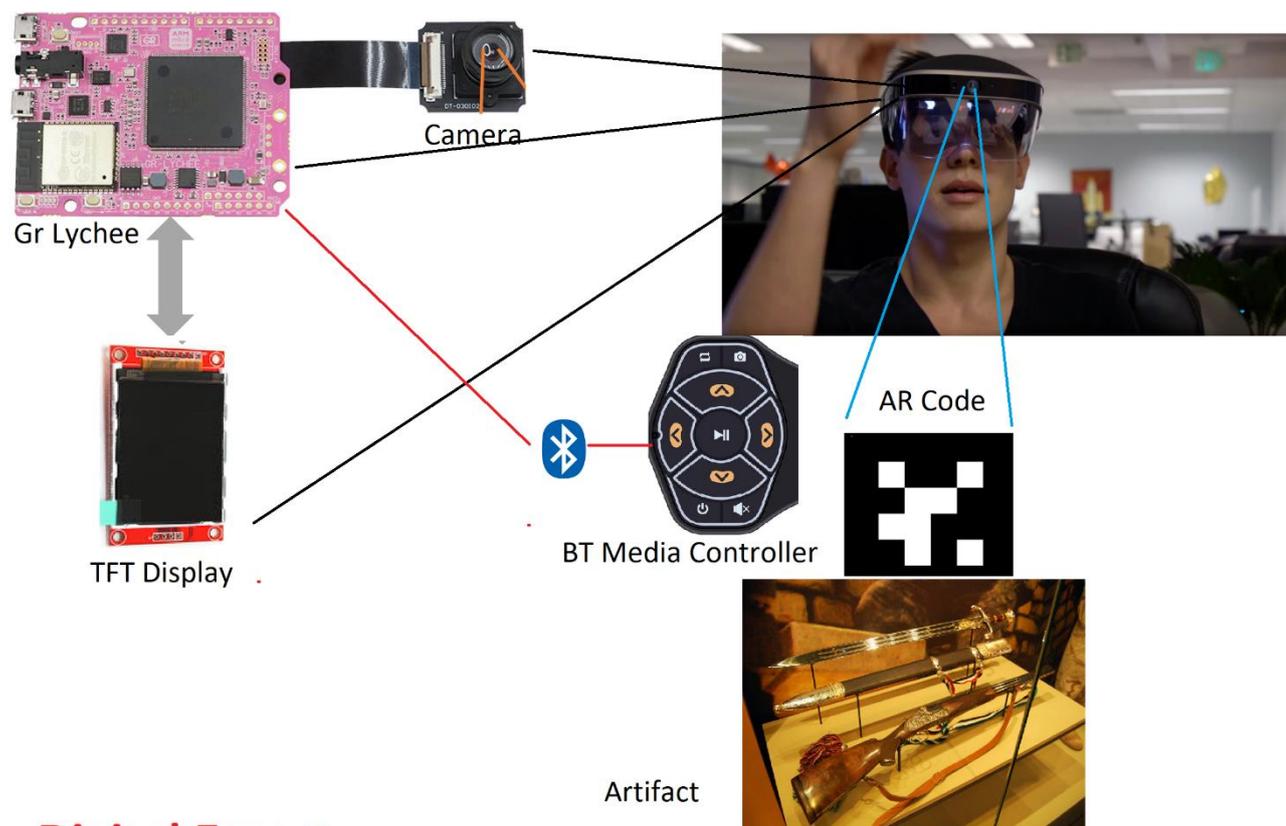
Digital Escort - Your personal tourist guide

Abstract: Project is mainly focus on the tourist for which India is in top 5 in world and will generate 200Cr+ revenue from different tourist across India. Our propose solution is to make a AR (Aka Augmented Reality) glass using GR LYCHEE to show the informative of artefact video to the tourist which he/she show on museum in real time. (i.e. if you go to the museum and you see the sword of maharan pratap and you will get the informative video on the glassed you wear. So the idea is design AR Marker code detection algorithm running on GR Lychee will detect the AR Code placed near to artefact and will play its video on the glasses you wear and it is in transparent screen so you can see other thing clearly.) Also Bluetooth controlled mediacontroller wrist band designed using any low power microcontroller connected to GR Lychee and using this media controller user can play, pause, fast forward/reverse, volume up/down or stop video.

Please see the working prototype which we have developed on raspberry pi

<https://www.youtube.com/watch?v=kT-94-ZrmH0>

Further more same setup can be also used as AR based indoor navigation to navigate user to exit point/wash room/cafeteria of museum by detecting AR codes placed at each location of Museum.



Digital Escort

Key Parts and its Function:

GRLychee board + Camera + TFT Display: GR Lychee is Heart of the project placed in head mount display. AR Marker detection algorithm running on GR Lychee detects AR Marker Codes captured by camera in realtime and plays corresponding video from memory card on TFT Display.

Powerbank: 5000 mAH 5V 2Amp power bank provides power to head mount GR Lychee camera and TFT Display.

Bluetooth Media Controller: HC-05 and low power microcontroller with 3.7V 180mAH LiPo battery used as media controller and its connected to GR Lychee ESP32 using RF COMM (Serial over Bluetooth) to control video being played on TFT LCD connected to GR Lychee.