

(B)

Development of customized virtual assistant for ITES using Raspberry-Pi.

Abstract

The design of the system was motivated by the complementary objectives of (a) relieving the user of routine tasks, thus allowing her to focus on tasks that critically require human problem-solving skills, and intervening in situations where cognitive overload leads to oversights or mistakes by the user.

This project is originated from a popular application *Alexa* (From Amazon). This application cum hardware is very interesting, easy going and convenient, with wide real world usage and large developing potential. The real idea is to use it for IT related service management.

Following are the detailed scope of work –

1. Configure Speech to text (STT) and vice versa (TTS).
2. Text Message transformation, systems should able to send the SMS to a specific person in the contacts. By giving a correct command contains the messaging request keyword together with the destination person.
3. Event handler, the system should allow the user to set as many events as they want.
4. Location services provide the functions for the user to check the current location or find the direction to a destination.
5. Google searching engine, the search engine enable the user to search anything on Google.
6. Camera, the camera function will call the camera on the connected device to take a picture of the current view, the picture will be stored in the Gallery for later viewing and operation.
7. Wikipedia searching engine, the search engine enable the user to search anything on Wikipedia.

Eligibility: Students of Branch B.E or B.Tech in Computer Engg. / Computer Sc. / IT / M.Sc in IT / Computer Sc. / MCA

Number of Student: 02 (Max.)

Relevant references:

[1] Allen, J., Blaylock, N., and Ferguson, G. 2002. A Problem Solving Model for Collaborative Agents. In Proceedings of the First International Conference on Autonomous Agents and Multiagent Systems, Bologna, Italy.

[2] Ambite, J.L., Chaudhri, V., Fikes, R., Jenkins, J., Mishra, S., Muslea, M., Uribe, T., and Yang, G. 2006. Design and Implementation of the CALO Query Manager. In Proceedings of the 18th Innovative Applications of Artificial Intelligence Conference, Boston, MA.

[3] Berry, P., Conley, K., Gervasio, M., Peintner, B., Uribe, T., and Yorke-Smith, N. 2006a. Deploying a Personalized Time Management Agent. In Proceedings of the Fifth International Conference on Autonomous Agents and Multiagent Systems, Hakodate, Japan.

[4] <http://sirius.clarity-lab.org/sirius/>

[5] <https://dialogflow.com/docs>

sharad.jash@ipr.res.in [Guide e-mail address] and

project_ee@ipr.res.in [Project coordinator's e-mail address]

Phone Number: 079-2396 2304 [Guide phone number]