

**Guru Gobind Singh College of Engineering and Research Centre, Nashik.**

**Department of Computer Engineering**

**Project Synopsys**

Academic Year: **2023-24**

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| **Project Title** | **Autonomous Restaurant Serving System using Image Detection and Voice Detection in Android Application .** |
| **Team Members** | **1. Vaishnavi Thakare** |
| **2. Janhavi Palve** |
| **3. Aman Tiwari** |
| **4. Vishal Pandit** |
| **Internal Guide**  **(Name and Sign)** | **Mrs. Farhat Patel** |
| **Project Coordinator**  **(Name and Sign)** | **Mrs. Pradnya K. Bachhav** |

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**Final Year Project Synopsys Format**

**Name/Title/Topic of the Project**: Autonomous Restaurant Serving System using Image Processing and Voiceprint Detection in Android Application.

**Objective and Scope:** This should give a clear picture and final outcome of the project. Objectives should be clearly specified. What the project ends up to and in what way it is going to help the end user has to be mentioned.

**Process Description:** The process of the whole software system proposed, to be developed, should be mentioned in brief. This can be supported by ***DFD's/ Flowcharts/Use Case Diagrams*** to explain the flow of the data and control in the project.

**Resources:** The requirement of the resources for designing and developing the proposed system must be given. The resources might be in form of the ***hardware / software or real time data.***

**References and bibliography:**The complete list of books (chapter listing, topic listing), website links (complete URLs) and research papers (title and authors, year of publications) must be mentioned.

**The students should write the answer for the following set of questions:**

**Question 1**: - Explain in at least 100 words the reasons, why should the department approve your project?

**Answer :** The Department should approve our project on a autonomous restaurant serving system in android application because its using image detection and voiceprint detection for several activities.

Firstly , our project have voiceprint recognition of the person so that the customer is not asked for additional personal details and also the database of the customer can be easily recognized using the voiceprint. This database can be used to customize the order for the customer making it easier for the restaurant or hotel to manage the customers.

Furthermore , our project can do special changes in the menu . This helps us to knowing about the allergic reactions of a person to some specific food items and a customizable menu can be provided to the person.

Secondly , our project can do detection of food items using image processing so that veg and non veg food items do not get mixed up and the correct tables receives the correct order and ingredients of food can also shown with help of image processing for customer satisfaction.

**Question 2**: - What are the strengths and limitations of your proposed work?

**Question 3**: - Explain in at least 100 words what will be the positive impact of the project on society/academics/college/industry.