**CSCE- 5222 Feature engineering**

**PROJECT PROPOSAL**

**TURING TEST FOR HOTEL MANAGEMENT SYSTEM**

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**Idea Description:**

The Alan Turing test was created in 1950. The purpose of the Turing test is to determine whether a computer is capable of thinking like a human being. As an illustration, consider a game with three participants, two machines, and one human. We can choose the human interrogator from the other two players. By posing some common questions about them, the interrogator's job is to determine whether the subject is human or computer. It is a job-by-turing test if the interrogator asks the computer certain incorrect questions to see if it is answering appropriately or not.

The renowned British computer scientist Alan Turing contributed to the development of a THEORETICAL model for a general-purpose computer known as a Turing Machine.

• Natural language processing to enable successful English communication;

• knowledge representation to keep track of what it has learned or heard;

• Automated reasoning that uses the data stored to answer queries and make new deductions

• The ability of machine learning to adjust to changing conditions and to identify and infer patterns

We use **CONSTRAINT SATISFACTION** functions to make use of 1st 2 requests in our above list.

We use **BASIC PROBABILITY** for checking availability of rooms.

And we use **FORWARD CHAINING** to calculate the fair of their stay in the hotel.

**Goals and Objectives:**

• The main objective of this package is to ensure that every aspect of hotel management, including room activities, room assignments based on consumer demand, admission of new customers, etc., is digitized and automated.

Hotel rooms are offered

Variety of rooms

Number of hotel days spent

Information about consumers' availabilities

**Motivation:**

Artificial intelligence has various applications in railroad service. AI is essential in helping to overcome the current issues with the railway system. Customers' questions can be satisfactorily addressed so that there is no room for confusion.

**Literature Survey:**

To describe whether or not computers can think, Mr. Alan Turing created the term "Computing Machinery and Intelligence." He made the decision to have a conversation between a human and a computer, and he wanted to create a computer that could act exactly like a human being in the absence of a human being, conducting the conversation using a text interface.

Turing test purpose is to avoid direct physical interaction between the interrogator and the computer, because physical simulation of a person is unnecessary for intelligence. However the so-called total Turing Test includes the interrogator can test the subject aware of something abilities as well as the opportunity for the interrogator to pass physical objects through the “door in an aircraft, spacecraft, or submarine” To pass the total Turing Test, the computer will need

**computer vision** to recognize the objects, and

**robotics to handle or control the** objects and move about.

**Features:**

1. Predicting Errors
2. Improving Accuracy
3. Improve Data Utilization

**Expected Outcome:**

To make use of Forward chaning, Basic probability, Constrant Satisfaction methods to make a hotel room service management system.

**References:**

1. [John Searle](https://en.wikipedia.org/wiki/John_Searle)'s 1980 paper [*Minds, Brains, and Programs*](https://en.wikipedia.org/wiki/Minds,_Brains,_and_Programs) proposed the "[Chinese room](https://en.wikipedia.org/wiki/Chinese_room)" thought experiment and argued that the Turing test could not be used to determine if a machine could think. Searle noted that software (such as ELIZA) could pass the Turing test simply by manipulating symbols of which they had no understanding. Without understanding, they could not be described as "thinking" in the same sense people did.
2. The Loebner Prize provides an annual platform for practical Turing tests with the first competition held in November 1991.[[38]](https://en.wikipedia.org/wiki/Turing_test#cite_note-FOOTNOTESundman2003-38) It is underwritten by [Hugh Loebner](https://en.wikipedia.org/wiki/Hugh_Loebner). The Cambridge Center for Behavioral Studies in [Massachusetts](https://en.wikipedia.org/wiki/Massachusetts), United States, organised the prizes up to and including the 2003 contest. As Loebner described it, one reason the competition was created is to advance the state of AI research, at least in part, because no one had taken steps to implement the Turing test despite 40 years of discussing it.

**Github URL:** <https://github.com/LeelaVaradattaSaiAddanki/Turing-test-for-hotel-management-system>