**Designing an Expert system for deciding where to travel using CLIPS - Summary**

Hafiz Ali Mohamed Hanif (IIT2019159)

Kunal Pende (IIT2019187)

**Abstract**  
The project explores the application of the C language based software tool for building expert systems known as CLIPS and creates a system for recommending travel destinations for the user.

**Introduction**

The study of visitor decisions and choices has become increasingly important. Academic and scientific circles, as well as travel professionals and those in charge of tourist policy, are interested in the characteristics, determinants, and forecasting of tourist satisfaction. In addition, incorporating expert systems into tourism policy can be a useful tool in the decision-making process in tourist destinations for better understanding of traveler preference formation and choice. Within the domain ESTD.GR, the suggested system is an Expert System for Tourist Destinations that collaborates with user-tourist-type. It focuses on fundamental components of tourist consumer behavior, such as motivations, choices, and decisions. The selection of acceptable variables is dependent on a number of aspects, including the type of tourist, the countries of origin, the time period evaluated owing to the economic crisis, expenditures, user ratings, and the forms and types of tourism in question.

Tourism is an activity that humanity has engaged in in some form or another for a very long period. Tourism, on the other hand, has only recently been acknowledged as a significant social and economic phenomenon. Its impacts are becoming more noticeable, both on an individual level and as a result of its societal impact. "Tourism is regarded as a vital activity in the lives of nations because of its direct influence on national societies' social, cultural, educational, and economic sectors, as well as on their international relations." Because of its growing and broader impact on society, as well as the resulting need to investigate and comprehend it, it is crucial to define what tourism is, which is especially significant from a statistical standpoint. It must be apparent what is being measured in order for statistical measurements to be significant. Tourism has typically been characterized in terms of tourist/visitor activities, i.e. demand side or supply side terminology.

**Methodology**

We have to make sure that the interface that we provide to the user will be pretty much easy and straightforward considering the type of consumer that approaches the system.

People who use the system won't necessarily be comfortable with advanced user interfaces and we have to find a suitable way to tackle this problem so that it looks approachable for people from either end of the spectrum.

In order to narrow down user preferences we need to first have a well defined data set which can be described as one which has all the must have information for a person who is searching for a place to travel to.

By providing a set of questions it will be easier for both user and the system to decide on what aspects to focus on.

After getting the user input the system will then trace through the fact list to find a suitable travel location for the user. We narrowed down to a large dataset which contains the attributes of:

* Place
* Transport type
* Place type
* Food type
* Weather
* Budget
* Duration

There are alot of attributes when it comes to tourism and selecting a few from it and collecting a dataset that is large enough to consider almost all forms of inputs is a real challenge.

Even if the system is simple a proper GUI will help users to easily distinguish what goes where and also makes the system more attractive.

User interface is important to meet user expectations and support effective functionality. A well-executed user interface facilitates effective interaction between the user and the program, app or machine through contrasting visuals, clean design and responsiveness.

By the use of a Java GUI framework we can create a user interface that could take needed inputs and only show the front end to the user instead of all the clutter in a IDE like the fact list and instance browser.

**Conclusion**

The current state of the project nearly 80% towards its implementation and working model can be represented at the moment. The user can interact with the system and based on the applied attributes we can yield a result for the location of travel.

In the future we would like to expand our classification system for the data to a more versatile approach where we classify the locations based on regions. Also we would like to apply the use of a GUI for better user experience using java and CLIPSJNI.