**Project Report on Expert System on Gestational Diabetes Diet.**

**Project description:**

The main aim of this expert system is that these women seeking of consultation receive correct and proper advice at their precious period and most importantly that they receive a piece of advice based on their nutritional requirements rather than the kind of uncertain information that they could find on the web. The end goal of this expert system is to have women access it from their own place, from their respective home. This system, on the other hand, will be able to help these females to keep a track on their diet and their meal which would help them maintain their blood sugar level and they’re by improving their health condition. And thereby reducing their time and money that they would have to invest in travelling and waiting.

**Methods used:**

The basic method used is to match the input conditions with the existing rules written for the expert system to function and give expert advice. It starts with the start state and reaches the final or the destination state.

**Justification:**

This expert system helps the patients to have healthy eating habits and help them maintained their blood sugar to the standard level. It does not need the women to come to see their doctor every time they are needed a new diet. It helps then take rest and save that time that they spend waiting to see their dietitians, and it also saves the time on the dietitian’s side as it reduces that time that he or she has to spend on one-on-one sessions. With the time saved from this, the dietitians can spend this time on those women who have complex health issues.

**Design Issues:**

The only issues that we faced where during putting down the described diet and setting conditions for the rules so that system runs smoothly.

**Implementation details:**

The program begins with the basic questions that help the system to understand the basic condition to be matched and asks questions like would regular exercise, emotional eating, cholesterol problems, blood sugar level, etc. based on the user input the system suggest an appropriate diet in order to main the users health.

**Difficulties encountered:**

Faced an issue while trying to consider all possible existing cases and tried executing it a several times on the expert system in order to not get false as an output.

**Performance analysis:**

With the regular contact that we maintained with our expert we crossed checked the confidentiality factor and were able to see that they could as accurate as possible, which says that the expert system is tested.

**Result Significance:**

We were able to get significate results based on the evaluation.

**Problem enhancements:**

This is not a complete expert system that talk about even a very instance of the stages of pregnancy. This expert’s system focuses on just one of the many things that go all while a female carries a baby. This expert system has could only help females to help prevent them only the diabetic problems, but for any other problem that is related to their pregnancy they need to visit a doctor and is a part of our future enhancement.

**Future Work:**

For the future, we can combine this expert system with machine learning systems to be able to help such females with all the possible problems that they could possibly come across. This system, on the other hand, will be able to help these females to keep a track on their diet and their meal which would help them maintain their blood sugar level but also help them in various other possible manners and they’re by improving their health condition. And thereby reducing their time and money that they would have to invest in travelling and waiting.