**Knowledge Based Systems (ITCS6155/8155)**

**Machine Learning for Online Query Relaxation Implementation**

**Group Members:**

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4. **Project Description:**

In this project, we are required to implement Flexible Query Answering System (FQAS) for the music dataset provided by the professor or any other dataset of our choice. We have to follow the steps explained in [Muslea’s](http://webpages.uncc.edu/ras/Muslea-paper.pdf) algorithm to relax failed queries.

1. **About the Dataset:**
   1. **Name:** Pima Indians Diabetes Data Set
   2. **Source:** <https://archive.ics.uci.edu/ml/datasets/Pima+Indians+Diabetes>
   3. **Data Set Information:**

Several constraints were placed on the selection of these instances from a larger database. In particular, all patients here are females at least 21 years old of Pima Indian heritage. ADAP is an adaptive learning routine that generates and executes digital analogs of perceptron-like devices. It is a unique algorithm; see the paper for details.

* 1. **Attributes:**

1. Number of times pregnant   
2. Plasma glucose concentration a 2 hours in an oral glucose tolerance test   
3. Diastolic blood pressure (mm Hg)   
4. Triceps skin fold thickness (mm)   
5. 2-Hour serum insulin (mu U/ml)   
6. Body mass index (weight in kg/(height in m)^2)   
7. Diabetes pedigree function   
8. Age (years)   
9. Class variable (0 or 1)

1. **Project Installation:**

Configuration steps

1. **Program Structure:**

Classes descriptions

1. **Execution Procedure:**

Example with snapshot