**Project3 Report for CS222**

The contents and implemental details of this project are described step by step in the related functions below:

**IX\_Manager::CreateIndex:**

Create a paged file with the name of the given attribute.

**IX\_Manager::DestroyIndex:**

Destroy the paged file created by the CreateIndex function.

**IX\_Manager::OpenIndex:**

If the index has not been created, return -1. Otherwise, initialize the input IX\_IndexHandle. Its member variables are as follow.

**public**:

AttrType type;

PF\_FileHandle pf\_fileHandle;

**private**:

string fileName;

string tableName;

**int** root;

**IX\_Manager::CloseIndex:**

Close the index file and release the file-handle for it.

**IX\_IndexHandle::IX\_IndexHandle:**

Initialize the index-handle to be unused. Let the file-handle points to nowhere, the strings be null, and type be integer.

**IX\_IndexHandle::InsertEntry:**

Insert a new entry into the index associated with IX\_IndexHandle. It inserts an entry for the pair(\*key,rid) into the index.

**IX\_IndexHandle::DeleteEntry:**

I can delete the entry for the (\*key,pair) from the index associated with IX\_IndexHandle.

**IX\_IndexScan::OpenScan:**

It initializa a condition-based scan over the entrues in the open index refered to by parameter indexHandle.

**IX\_IndexScan::GetNextEntry:**

It sets output parameter rid to be the RID of the next record in the index scan.

**IX\_IndexScan::CloseScan**

It terminates the index scan.