

## **Logical Design:**

Client (ClientID, ClientFName, ClientLName, ClientGen, ClientEntryDate, MentorID)

CounselingService (<u>CSID</u>, CSFocus)

CounselingUse (CUID, ClientID, CSID, CUHrs)

CriminalRecord (<u>CRecID</u>, CRecType, CRecDesc. CRecCommDate, CRecSentDate, CRecSentLen, *ClientID*)

JobOpening (<u>JobID</u>, JobTitle, CompanyName, JobHourlyWage)

JobAppliication (JAID, ClientID, JobID, JAAppDate, JAAppStatus)

Course (<u>CrsID</u>, CrsDur)

CourseCompletion (<u>CrsCmpIID</u>, *ClientID*, *CrsID*, CrsCmpIDateCompleted, CrsComplCourseGrade, CrsCmpIBehGrade)

## **Physical Design:**

```
CREATE TABLE Client (
      ClientID CHAR(5) PRIMARY KEY,
      ClientFName VARCHAR(40) NOT NULL,
      ClientLName VARCHAR(40) NOT NULL,
      ClientGen CHAR(1),
      ClientEntryDate DATE,
      MentorID CHAR(5),
      FOREIGN KEY (MentorID)
             REFERENCES Client (ClientID)
             ON DELETE SET NULL)
CREATE TABLE CounselingService (
      CSID CHAR(5) PRIMARY KEY,
      CSFocus VARCHAR(40))
CREATE TABLE CounselingUse (
      CUID CHAR(5) PRIMARY KEY,
      CUHrs TIME,
      ClientID CHAR(5),
      CSID CHAR(5),
      FOREIGN KEY (CSID)
             REFERENCES CounselingService (CSID),
      FOREIGN KEY (ClientID)
             REFERENCES Client (ClientID))
CREATE TABLE CriminalRecord (
      CRecID CHAR(5) PRIMARY KEY,
      CRecType VARCHAR(25),
      CRecDesc TEXT,
      CRecCommDate DATE,
      CRecSentDate DATE,
      CRecSentLen INT,
      ClientID CHAR(5)
      FOREIGN KEY (ClientID)
             REFERENCES Client (ClientID))
CREATE TABLE JobOpening (
      Jobid Char(5) PRIMARY KEY,
      Company VARCHAR(30),
      JobTitle VARCHAR(50),
      JobHourlyWage FLOAT)
```

```
CREATE TABLE JobApplication (
      JAID CHAR(5) PRIMARY KEY,
      JAAppDate DATE,
      JAAppStatus VARCHAR(15),
      ClientID CHAR(5),
      JobID CHAR(5),
      FOREIGN KEY (JobID)
             REFERENCES JobOpening (JobID),
      FOREIGN KEY (ClientID)
             REFERENCES Client (ClientID))
CREATE TABLE Course (
      CrsID CHAR(5) PRIMARY KEY,
      CrsDur INT)
CREATE TABLE CourseCompletion (
      CrsCmplID CHAR(5) PRIMARY KEY,
      CrsCmplDateCompleted DATE,
      CrsComplCourseGrade INT,
      CrsCmplBehGrade INT,
```

ClientID CHAR(5), CrsID CHAR(5),

FOREIGN KEY (CrsID)

FOREIGN KEY (ClientID)

REFERENCES Course (CrsID),

REFERENCES Client (ClientID))