CMPT 354 - Database Systems I
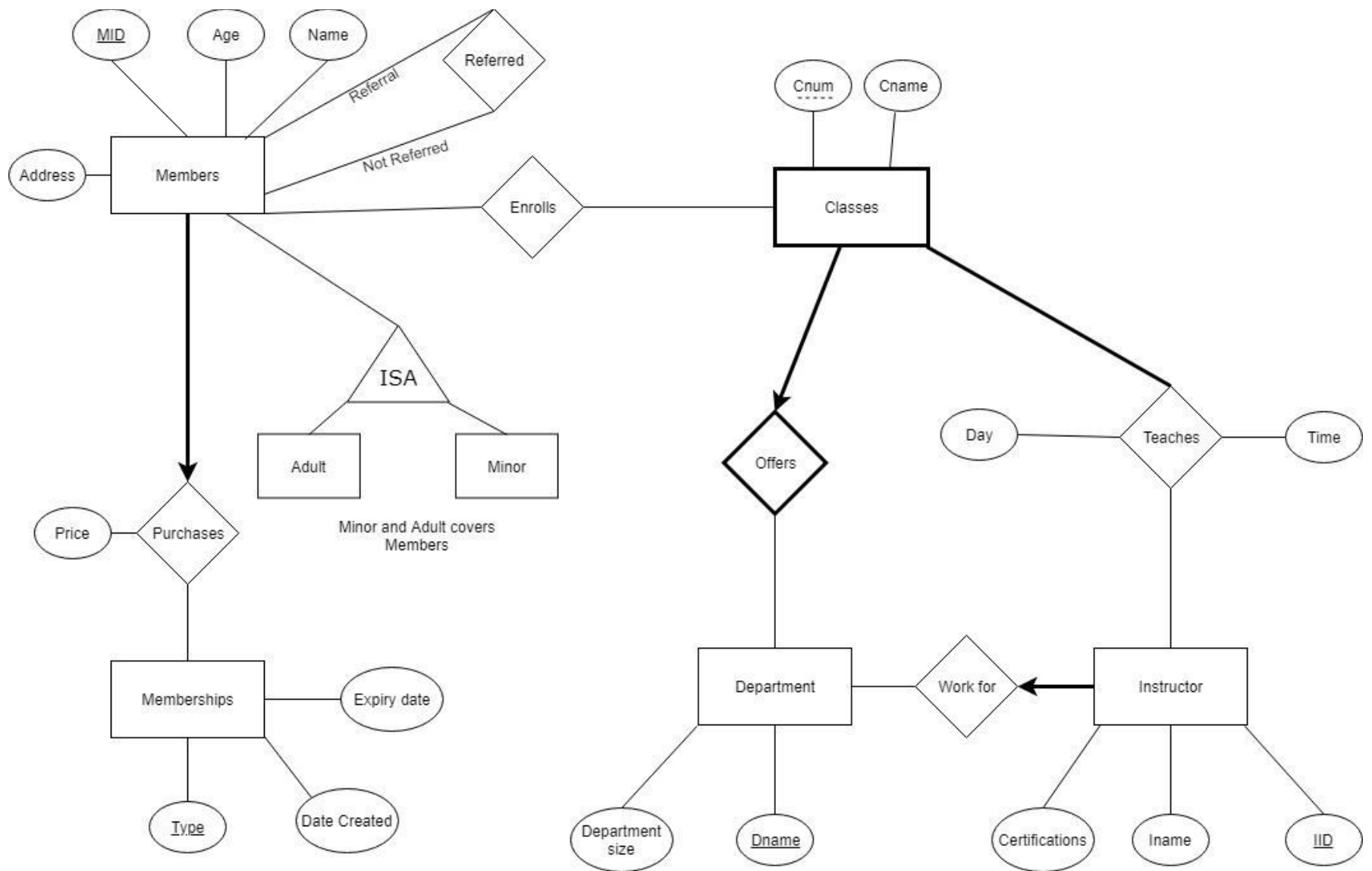
Group Project - Implementation of a Relational Database

Project Title:	Recreation Center Database
Project Milestone:	#2

#	Student Name	Student ID	Email Address
1	Gergely Sajdik	301142046	gsajdik@sfu.ca
2	Michael Vahid Ye Gergely	301225946	mgergely@sfu.ca
3	Kexuan Ding	301295799	kexuand@sfu.ca
4	Lunwei Zhang	301215550	lunweiz@sfu.ca

By keying our names and student IDs in the above table, we certify that the work submitted with this cover page was performed solely by those whose names and student IDs are included above.

Also, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the SFU.

Relational Schema:

Classes_Offers (<u>Cnum:</u> Integer, **Dname:** String, Cname: String)
FOREIGN KEY (Dname) REFERENCES Department (Dname)
ON DELETE CASCADE
ON UPDATE CASCADE

Instructor_Works (<u>IID:</u> Integer, **Dname:** String, Iname: String, Certifications: String)
FOREIGN KEY (Dname) REFERENCES Department (Dname)
ON DELETE CASCADE
ON UPDATE CASCADE

Department (<u>Dname:</u> String, Department_Size: Integer)

Teaches (**Dname**: String, **Cnum:** Integer, **IID**: Integer, Day: String, Time: Integer)
FOREIGN KEY (Dname) REFERENCES Department (Dname)
ON DELETE SET NULL
ON UPDATE CASCADE
FOREIGN KEY (Cnum) REFERENCES Classes_Offers (Cnum)
ON DELETE SET NULL
ON UPDATE CASCADE
FOREIGN KEY (IID) REFERENCES Instructor_Works (IID)
ON DELETE SET NULL
ON UPDATE CASCADE

Enrolls (**<u>MID</u>**: Integer, **<u>Cnum</u>**: Integer)
FOREIGN KEY (MID) REFERENCES Members (MID),
ON DELETE SET NULL
ON UPDATE CASCADE
FOREIGN KEY (Cnum) REFERENCES Classes (Cnum)
ON DELETE SET NULL
ON UPDATE CASCADE

Member_Purchases (<u>MID:</u> Integer, **Type**: String, Price: Integer, Age: Integer, Name: String)
FOREIGN KEY (Type) REFERENCES Memberships (Type)
ON DELETE SET NULL
ON UPDATE CASCADE

Referred (**ReferralMID**: Integer, **NotReferred-MID**: Integer)
FOREIGN KEY (ReferralMID) REFERENCES Members (MID)
ON DELETE CASCADE
ON UPDATE CASCADE
FOREIGN KEY (NotReferred-MID) REFERENCES Members (MID)
ON DELETE CASCADE
ON UPDATE CASCADE)

Memberships (<u>Type:</u> String, DateCreated: Date, ExpiryDate: Date)