

Group 9: David Marin, Huu Nguyen, Hyejin Ryoo, Jay-An Yang

Topic:

The distribution of ID card from the CUNYCard center to individual students and staff working in CUNY

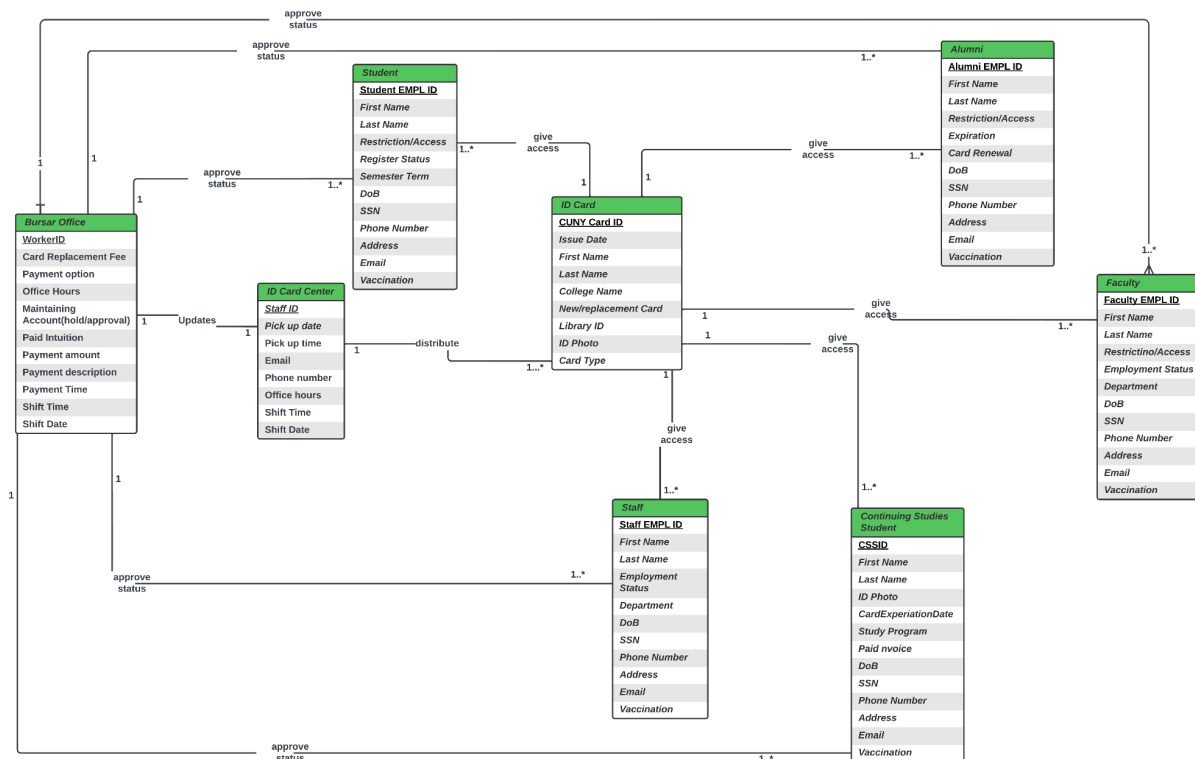
Problem Statement:

Baruch College offers public education for undergraduate and graduate students in a wide range of programs. When the student is accepted into Baruch College, they have to submit documents and go through a process to obtain their Cuny ID card. A similar process is required for new staff in Baruch College.

Currently, the Cuny ID distribution system requires update to provide Cuny ID cards safely and effectively to everyone. As Cuny card center is not only based on sensitive information from individuals but also through collaboration with other administrative departments, a well-organized database between related tables is required. We researched and designed the database to improve distribution of Cuny ID cards safely and effectively.

ER MODEL

- ❖ Bursar Office: WorkerID, Card Replacement Fee, Payment option, Office Hours, Maintaining Account(hold/approval), Paid Intuition, Payment amount, Payment description, Payment Time, Shift time, shift date
- ❖ ID Card Center: Staff ID, Pick up date, Pick up time, Email, Phone number, Office hours, Shift time, shift date
- ❖ ID Card: CUNY Card ID, Issue Date, First Name, Last Name, College Name, LibraryID, ID Photo, Card type, New/replacement Card
- ❖ Staff: Staff EMPL ID, First name, Last name, Employment status, Department, DoB, SSN, Phone Number, Address, Email, Vaccination
- ❖ Student: Student EMPL ID, First name, Last name, Restrictions/Access, Register Status, Semester Term, DoB, SSN, Phone Number, Address, Email, Vaccination,
- ❖ Faculty: Faculty EMPL ID, First name, Last name, Department, Restrictions/Access, Employment Status, DoB , SSN, Phone Number, Address, Email, Vaccination
- ❖ Alumni: Alumni EMPL ID, First name, Last name, Restrictions/Access, Expiration, Card Renewal, DoB, SSN, Phone Number, Address, Email, Vaccination
- ❖ Continuing Studies Student: CSSID, First Name, Last Name, ID Photo, CardExpirationDate, Study Program, PaidInvoice, DoB, SSN, Phone Number, Address, Email, Vaccination



Assumptions:

- Bursar Office
 - Based on Professor feedback on having worker ID, we added worker ID to specify a worker during the update between Bursar office and ID Card Center. If there is any issues or updates, ID Card Center knows which specific worker to contact
 - The payment option are cash, credit card, and debit card
 - The payment time is someone paying their dues and having a time frame for the account to reflect the payment. Example, student pays on monday for intuition, but the account will update in few working days
- ID Card Center:
 - Based on Professor feedback on having staff ID, we added staff ID to specify a worker during the update between ID Card Center and ID Card. If there is any issues or questions, ID card holder knows which specific worker to contact
- ID Card
 - Card type refers the label of student, alumni, staff, faculty, and continuing studies student on the ID card
 - ID Photo is taken at ID Card Center by the staff (staff ID) and store in the cuny system.
 - New/replacement card refer if the card is original card or a replacement card when the person lost their previous card
- Alumni, Student, Faculty, Staff, continuing studies student
 - Restriction/Access refers to the users
 - EMPL ID is able to retrieve related data from CUNY system. For example, Bursar office can find Student's SSN and other information through student EMPL ID
- Alumni
 - The expirational refers to their CUNY id card expiring June 30 annually.
 - The card renewal refers to renewing their cuny id

- Continuing studies student
 - Based on Card Center website, the cuny card id is activated during the study program
 - ID photo refers to the person's identification photo such as passport, state id or any photo identification required to show with the Bursar's receipt
 - Paid invoice is Bursar's receipt

Lucid Link:

https://lucid.app/lucidchart/f92d6736-0a2a-4675-b710-715e8cfc6711/edit?viewport_loc=-221%2C7%2C2925%2C1309%2C0_0&invitationId=inv_bd1ccf75-f5db-40b1-b2a2-2703eb0f2adc

Relational Model

- Bursar Office: WorkerID, Card Replacement Fee, Payment option, Office Hours, Maintaining Account(hold/approval), Paid Intuition, Payment amount, Payment description, Payment Time, Shift time, Shift Date, Student EMPL ID(fk), Staff EMPL ID(fk), Faculty EMPL ID(fk), Alumni EMPL ID(fk), CSSID(fk)
- Staff: Staff EMPL ID, First name, Last name, Employment status, Department, DoB, SSN, Phone Number, Address, Email, Vaccination
- ID Card Center: Staff ID, Pick up Date, Pick up Time, Phone Number, Email, Office hours, Shift time, Shift Date, CUNY Card ID(fk)
- ID Card: CUNY Card ID, Issue Date, First Name, Last Name, College Name, LibraryID, ID Photo, Card type, New/replacement Card, Student EMPL ID(fk), Staff EMPL ID(fk), Faculty EMPL ID(fk), Alumni EMPL ID(fk), CSSID(fk)
- Student: Student EMPL ID, First name, Last name, Restrictions/Access, Register Status, Semester Term, DoB, SSN, Phone Number, Address, Email, Vaccination
- Faculty: Faculty EMPL ID, First name, Last name, Department, Restrictions/Access, Employment Status, DoB , SSN, Phone Number, Address, Email, Vaccination
- Alumni: Alumni EMPL ID, First name, Last name, Restrictions/Access, Expiration, Card Renewal, DoB, SSN, Phone Number, Address, Email, Vaccination
- Continuing Studies Student: CSSID, First Name, Last Name, ID Photo, CardExpirationDate, Study Program, PaidInvoice, DoB, SSN, Phone Number, Address, Email, Vaccination

NORMALIZATION

ID Card Center(**Staff ID**, Pick up date, Pick up time, Email, Phone number, Office hours, Shift time, Shift date, CUNY Card ID(fk))

ID Card(**CUNY Card ID**, Issue Date, First Name, Last Name, College Name, Status, LibraryID, ID Photo, Card type, New/replacement Card)

Bursar Office(**WorkerID**, Card Replacement Fee, Payment option, Office Hours, Maintaining Account(hold/approval), Paid Intuition, Payment amount, Payment description, Payment Time, Shift time, Shift date)

Student(**Student EMPL ID**, First Name, Last Name, Restrictions/Access, Register Status, Semester Term, DoB, SSN, Phone Number, Address, Email, Vaccination, CUNY Card ID(fk))

Staff(**Staff EMPL ID**, First name, Last name, Employment status, Department, DoB, SSN, Phone Number, Address, Email, Vaccination, CUNY Card ID(fk))

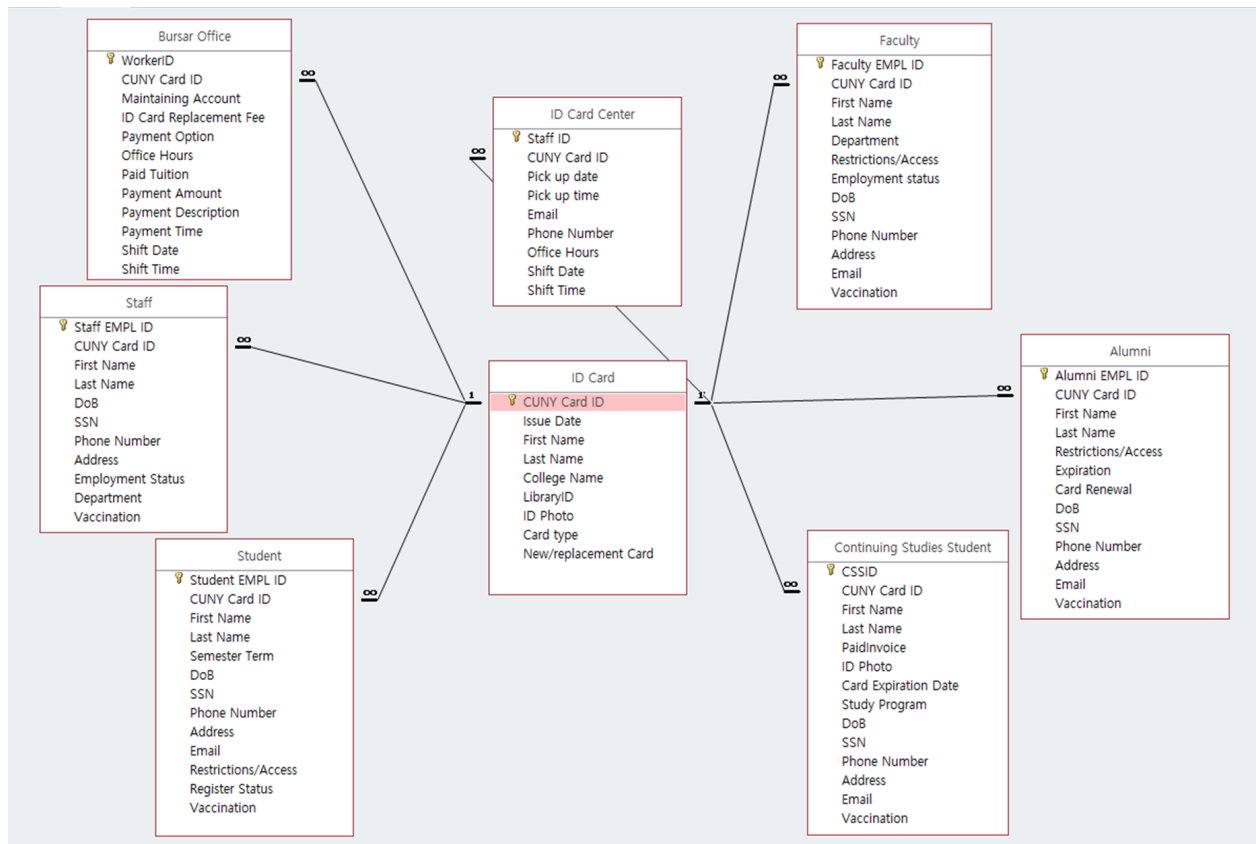
Faculty(**Faculty EMPL ID**, First name, Last name, Department, Restrictions/Access, Employment Status, DoB , SSN, Phone Number, Address, Email, Vaccination, CUNY Card ID(fk))

Alumni(**Alumni EMPL ID**, First name, Last name, Restrictions/Access, Expiration, Card Renewal, DoB, SSN, Phone Number, Address, Email, Vaccination, CUNY Card ID(fk))

Continuing Studies Student(**CSSID**, First Name, Last Name, ID Photo, CardExpirationDate, Study Program, PaidInvoice, DoB, SSN, Phone Number, Address, Email, Vaccination, CUNY Card ID(fk))

Assumption: EMPL ID is able to retrieve related data from CUNY system. For example, Bursar office can find Student's SSN and other information through student EMPL ID. There is no need to normalize if EMPL ID is able to provide information when needed.

ACCESS DATABASE



```

1) CREATE TABLE `ID Card ` (
  `CUNY Card ID` INT NOT NULL,
  `Issue Date` VARCHAR (45) NULL,
  `First Name` VARCHAR (45) NULL,
  `Last Name` VARCHAR (45) NULL,
  `College Name` VARCHAR (45) NULL,
  `LibraryID` VARCHAR (45) NULL,
  `ID Photo` VARCHAR (45) NULL,
  `Card type` VARCHAR (45) NULL,
  `New/replacement Card` VARCHAR (45) NULL,
  PRIMARY KEY (`CUNY Card ID`));
    
```

CUNY Card ID	Issue Date	First Name	Last Name	College Name	Status	LibraryID	ID Photo	Card type	New/replacement Card	
*										

```

2) CREATE TABLE `ID Card Center`(
  `Staff ID` INT NOT NULL,
  `CUNY Card ID` INT NOT NULL,
  `Pick up date` DATE NOT NULL,
  `Pick up time` VARCHAR (45) NOT NULL,
  Email VARCHAR(40) NULL,
  `Phone Number` VARCHAR(10) NULL,
  `Office Hours` VARCHAR(45) NULL,
  `Shift Date` DATE NULL,
    
```

`Shift Time` VARCHAR(45) NULL,
PRIMARY KEY (`Staff ID`),
FOREIGN KEY (`CUNY Card ID`) REFERENCES `ID Card`);

Staff ID	CUNY Card ID	Pick up date	Pick up time	Email	Phone Number	Office Hours	Shift Date	Shift Time
*								

3) CREATE TABLE Alumni (
`Alumni EMPL ID` INT NOT NULL,
`CUNY Card ID` INT NOT NULL,
`First Name` VARCHAR(45) NULL,
`Last Name` VARCHAR(45) NULL,
`Restrictions/Access` VARCHAR(45) NULL,
`Expiration` VARCHAR(45) NULL,
`Card Renewal` VARCHAR(45) NULL,
`DoB` DATE NULL,
SSN VARCHAR(45) NULL,
`Phone Number` VARCHAR(10) NULL,
Address VARCHAR(45) NULL,
Email VARCHAR(40) NULL,
`Vaccination` VARCHAR(45) NULL,
PRIMARY KEY (`Alumni EMPL ID`),
FOREIGN KEY (`CUNY Card ID`) REFERENCES `ID Card`);

Alumni EMPL ID	CUNY Card ID	First Name	Last Name	Restrictions/Access	Expiration	Card Renewal	DoB	SSN	Phone Number	Address	Email	Vaccination
*												

4) CREATE TABLE Student (
`Student EMPL ID` INT NOT NULL,
`CUNY Card ID` INT NOT NULL,
`First Name` VARCHAR(45) NULL,
`Last Name` VARCHAR(45) NULL,
`Semester Term` VARCHAR(12) NULL,
`DoB` DATE NULL,
SSN VARCHAR(45) NULL,
`Phone Number` VARCHAR(10) NULL,
Address VARCHAR(45) NULL,
Email VARCHAR(40) NULL,
`Restrictions/Access` VARCHAR(45) NULL,
`Register Status` VARCHAR(45) NULL,
`Vaccination` VARCHAR(45) NULL,
PRIMARY KEY (`Student EMPL ID`),
FOREIGN KEY (`CUNY Card ID`) REFERENCES `ID Card`);

Student EMPL ID	CUNY Card ID	First Name	Last Name	Semester T	DoB	SSN	Phone Nur	Address	Email	Restriction	Register St	Vaccinatio
*												

5) CREATE TABLE `Bursar Office` (
WorkerID INT NOT NULL,
`CUNY Card ID` INT NOT NULL,
`Maintaining Account` VARCHAR(45) NOT NULL,
`ID Card Replacement Fee` VARCHAR(45) NULL,
`Payment Option` VARCHAR(45) NULL,

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