IT Alumni Database Milestone 3 Report IT 4983

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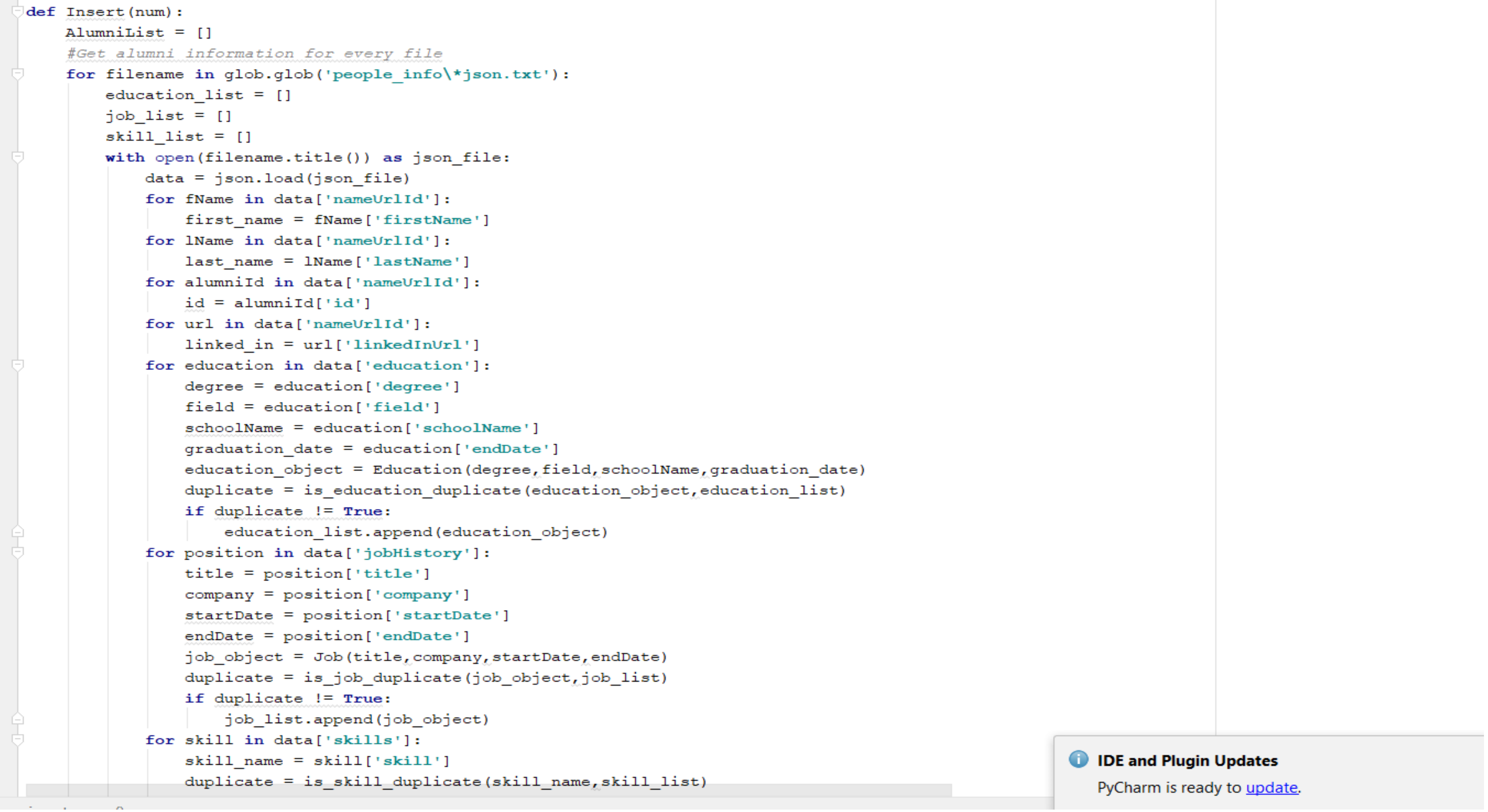
Project Summary

Deliverables	Status
Database to store Alumni Information	Completed
Ability to insert data	Completed
Ability to update existing alumni data	Completed



```
def Insert(num):
    AlumniList = []
    #Get alumni information for every file
    for filename in glob.glob('people_info\*json.txt'):
        education_list = []
        job_list = []
        skill_list = []
        with open(filename.title()) as json_file:
            data = json.load(json_file)
            for fName in data['nameUrlId']:
                first_name = fName['firstName']
            for lName in data['nameUrlId']:
                last_name = lName['lastName']
            for alumniId in data['nameUrlId']:
                id = alumniId['id']
            for url in data['nameUrlId']:
                linked_in = url['linkedInUrl']
            for education in data['education']:
                degree = education['degree']
                field = education['field']
                schoolName = education['schoolName']
                graduation_date = education['endDate']
                education_object = Education(degree,field,schoolName,graduation_date)
                duplicate = is_education_duplicate(education_object,education_list)
                if duplicate != True:
                    education_list.append(education_object)
            for position in data['jobHistory']:
                title = position['title']
                company = position['company']
                startDate = position['startDate']
                endDate = position['endDate']
                job_object = Job(title,company,startDate,endDate)
                duplicate = is_job_duplicate(job_object,job_list)
                if duplicate != True:
                    job_list.append(job_object)
            for skill in data['skills']:
                skill_name = skill['skill']
                duplicate = is_skill_duplicate(skill_name,skill_list)
```

IDE and Plugin Updates

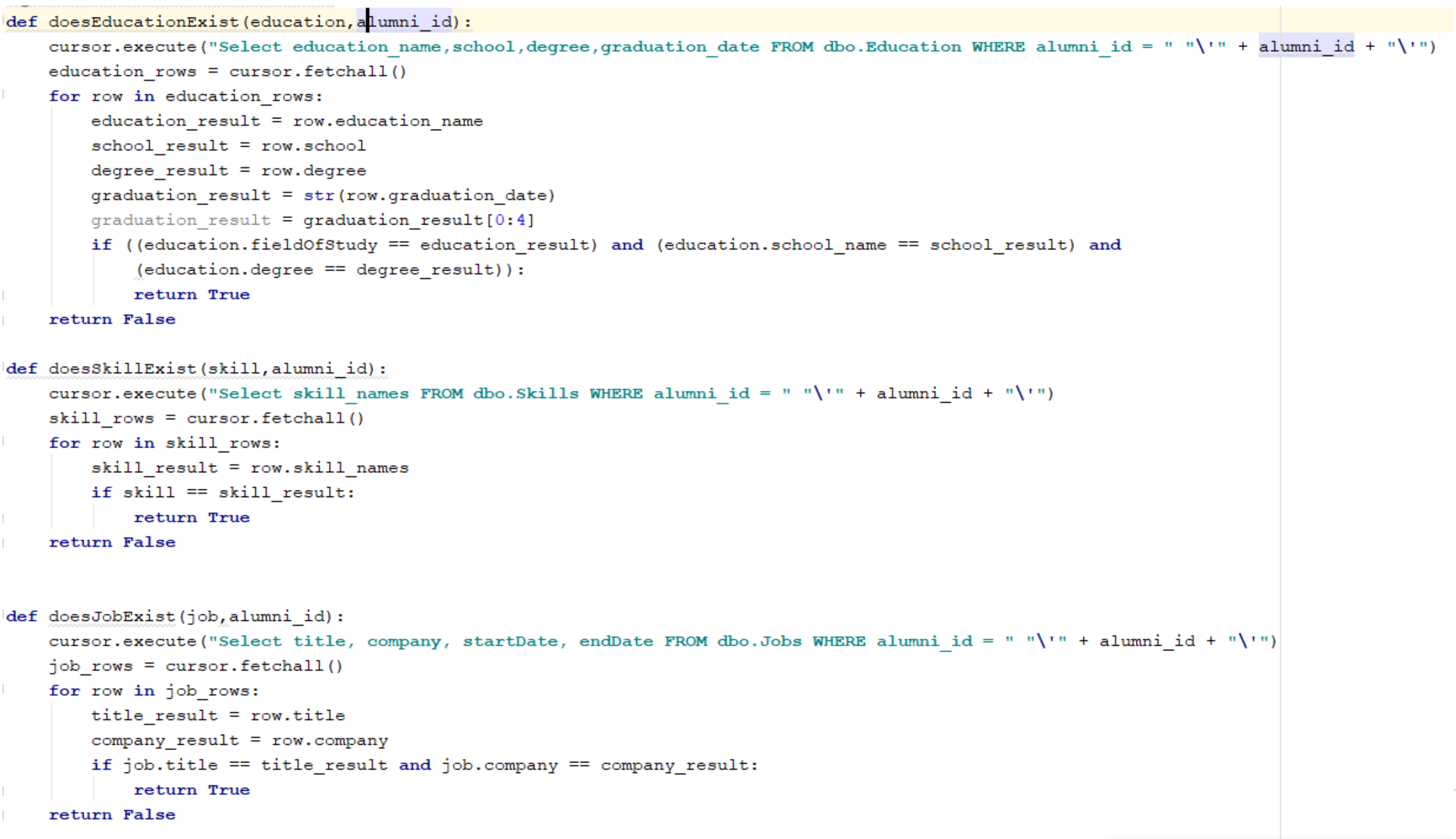
PyCharm is ready to update.

Snippet of Insert Script

Explanation of Insert script

- - A separate JSON file is created for each alumni student that is being looked up on Linkedin
- The insert script stores the information in a class, called Alumni. The alumni class for that student is then appended to a list.
- After each alumni is appended to the alumni list, the insert function begins to insert the data into a database

Snippet of the Update Script



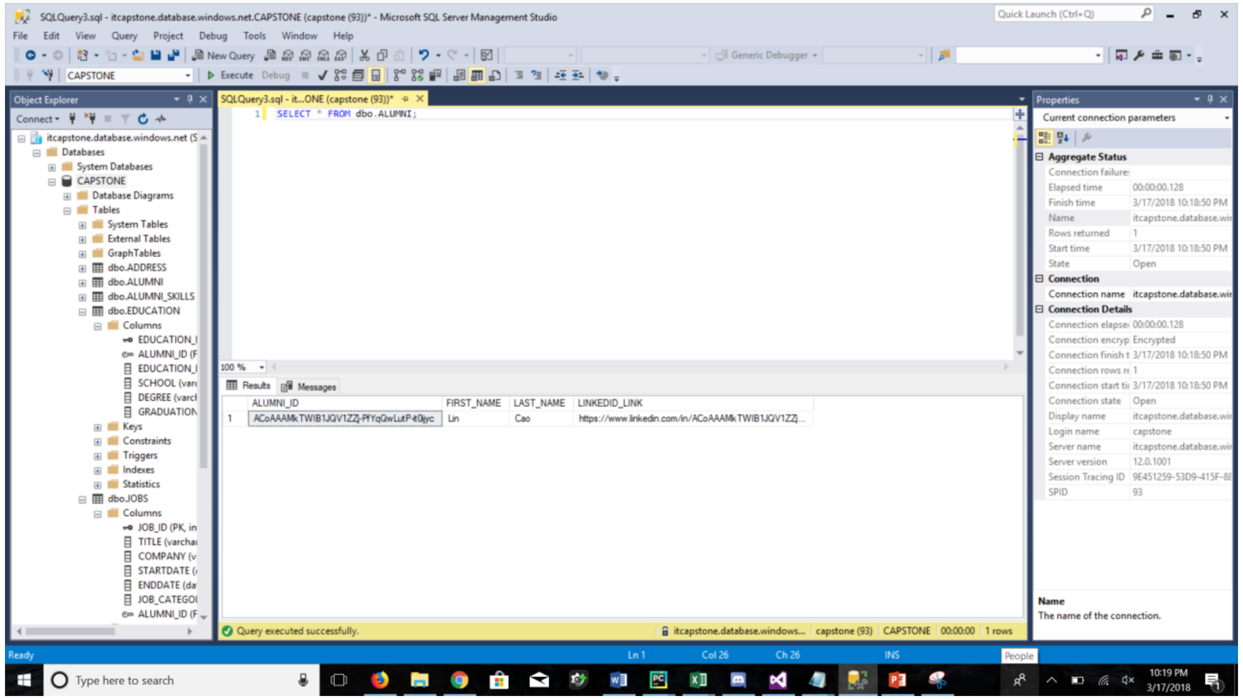
```python
def doesEducationExist(education,alumni_id):
    cursor.execute("Select education_name,school,degree,graduation_date FROM dbo.Education WHERE alumni_id = " "\'" + alumni_id + "\'")
    education_rows = cursor.fetchall()
    for row in education_rows:
        education_result = row.education_name
        school_result = row.school
        degree_result = row.degree
        graduation_result = str(row.graduation_date)
        graduation_result = graduation_result[0:4]
        if ((education.fieldOfStudy == education_result) and (education.school_name == school_result) and
            (education.degree == degree_result)):
            return True
    return False

def doesSkillExist(skill,alumni_id):
    cursor.execute("Select skill_names FROM dbo.Skills WHERE alumni_id = " "\'" + alumni_id + "\'")
    skill_rows = cursor.fetchall()
    for row in skill_rows:
        skill_result = row.skill_names
        if skill == skill_result:
            return True
    return False


def doesJobExist(job,alumni_id):
    cursor.execute("Select title, company, startDate, endDate FROM dbo.Jobs WHERE alumni_id = " "\'" + alumni_id + "\'")
    job_rows = cursor.fetchall()
    for row in job_rows:
        title_result = row.title
        company_result = row.company
        if job.title == title_result and job.company == company_result:
            return True
    return False
```

Explanation of Previous snippet of the update script

- The update script works similarly to the Insert script.

- However, the methods such as doesEducationExist() and doesJobExist() checks to make sure the data read from LinkedIn isn’t already in the database.

- Existing data is updated if the row already exists in the database



SQLQuery3.sql - itcapstone.database.windows.net.CAPSTONE (capstone (93))* - Microsoft SQL Server Management Studio

```sql
SELECT * FROM dbo.ALUMNI;
```

	ALUMNI_ID	FIRST_NAME	LAST_NAME	LINKEDID_LINK
1	ACoAAAMkTWIB1JQV1ZZj-PfYqQwLutP-it0jyc	Lin	Cao	https://www.linkedin.com/in/ACoAAAMkTWIB1JQV1ZZj...

Query executed successfully. | itcapstone.database.windows... | capstone (93) | CAPSTONE | 00:00:00 | 1 rows

Properties: Current connection parameters

Aggregate Status	
Connection failure:	
Elapsed time	00:00:00.128
Finish time	3/17/2018 10:18:50 PM
Name	itcapstone.database.wi
Rows returned	1
Start time	3/17/2018 10:18:50 PM
State	Open
Connection	
Connection name	itcapstone.database.wi
Connection Details	
Connection elapse	00:00:00.128
Connection encryp	Encrypted
Connection finish t	3/17/2018 10:18:50 PM
Connection rows re	1
Connection start ti	3/17/2018 10:18:50 PM
Connection state	Open
Display name	itcapstone.database.wi
Login name	capstone
Server name	itcapstone.database.wi
Server version	12.0.1001
Session Tracing ID	9E451259-53D9-415F-8
SPID	93

Name
The name of the connection.

Data from Alumni table after being inserted from Python