

JumpStart Application

Senior Project 2022-2023

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Project Introduction

- Sponsor: WWU Academic Advisement;
Carlyle Tagalog and Herlinda Ruvalcaba
- Mentor: Zach Parker
- Goal: replace existing third-party scheduler
(JumpStart Admin) with one using our
existing database.
- Languages: PeopleCode and T-SQL



Home

Welcome to the scheduler.

	09-19 Monday	09-20 Tuesday	09-21 Wednesday	09-22 Thursday	09-23 Friday
07:00	Red	Red	Red	Red	Red
08:45	Red	Red	Red	Red	Red
09:30	Red	Red	Red	Red	Red
09:35	Red				
10:00	Red	Blue, Green			Green
10:20	Red				
10:25	Red				
10:30			Red		
10:45	Blue				
11:00		Green, Blue, Green	Green, Blue, Yellow, Green		Green, Yellow, Green
11:30			Blue		
12:00	Red	Red	Red	Red	Red
13:00	Red	Red	Green, Blue, Yellow	Red	Red
13:25	Red	Red			

Pictured: JumpStart Admin homepage

Design Goals and Process

- Support general and group sessions of different requirement types.
- Support repeated events of the same category.
- Support automated generation and manual editing of student schedule.
- Create intuitive flow for addition both for the user and for continued production.

Quarter Updates

- Adding in validation code on field entry.
- Creating SQL for data selection, entry, and deletion.
- Developing generation functions for different parts of the system.
- Setting up app package and DTO conversion.

To Be Developed

- Schedule view for students
- Electives
- Data quality queries

Session Key Generation

- Sets up base categories to be scheduled on student schedules.

Session Key Generation

Category Name ABCD

Scroll Area Find | View All First 1 of 1 Last

*Effective Date 05/23/2023 *Status Active

*Description Example Cat

*Requirement Type General Se

Info This is an example of a General Session Category. It will be mandatory for all students to attend. Other Requirement Types have different scheduling logic.

Save Add Update/Display Include History Correct History

WWU_JMP_SKGEN (Record)

Num	Field Name	Type	Key	Ordr	Dir	C...	Sr...	List	Sys	Audt	In...	EnAut...	Default
1	CATEGORY	Char	Key	1	A...		Yes	Yes	No		No	No	
2	EFFDT	Date	Key	2	D...		No	No	No		No	No	%date
3	EFF_STATUS	Char					No	No	No		No	No	'A'
4	DESCR	Char	Alt		A...		No	Yes	No		No	No	
5	DESCRLONG	Long					No	No	No		No	No	
6	JMP_REQ_TYPE	Char					No	No	No		No	No	

JumpStart Term 2229 Autumn, 2022

Start Date 04/02/2023 | End Date 04/08/2023

Events Find First 1-3 of 3 Last

*Date 04/02/2023

	*Start Time	*End Time	*Category	Facility ID	Instance Number	Requirement Type	Description	Responsible ID	Responsible Name	Info
1	4:00AM	5:00AM	AAAA	ADM210	1	All	Gen A		General Session A	+ -
2	4:00AM	6:00AM	CCCC	ADM205	2	Info	INFO C		Information C	+ -
3	6:00AM	7:00AM	BBBB	CTC311	1	All	Gen B		General Session B	+ -
4	7:00AM	10:00AM	CCCC	CTC123	3	Info	INFO C		Information C	+ -
5	8:00AM	9:00AM	AAAA	CSP215	2	All	Gen A		General Session A	+ -

*Date 04/03/2023

	*Start Time	*End Time	*Category	Facility ID	Instance Number	Requirement Type	Description	Responsible ID	Responsible Name	Info
1	4:30AM	5:00AM	CCCC	ADM201	1	Info	INFO C		Information C	+ -
2	10:00AM	2:00PM	EEEE	CSP313	1	Once	Breakout E		Breakout Session Example	+ -

*Date 04/04/2023

	*Start Time	*End Time	*Category	Facility ID	Instance Number	Requirement Type	Description	Responsible ID	Responsible Name	Info
1	5:00AM	6:00AM	AAAA	CSP165	1	All	Gen A		General Session A	+ -
2	7:00AM	8:00AM	AAAA	ADM208	2	All	Gen A		General Session A	+ -

Save | Return to Search

General Schedule

- Create general schedules
- View student information dashboard
- Set up JumpStart dates

JumpStart Scheduler

Enter any information you have and click Search. Leave fields blank for a list of all values.

Find an Existing Value

Search Criteria

Term begins with

Description begins with

Short Description begins with

Case Sensitive

Search | Clear | Basic Search | Save Search Criteria

JumpStart Term 2229 Autumn, 2022

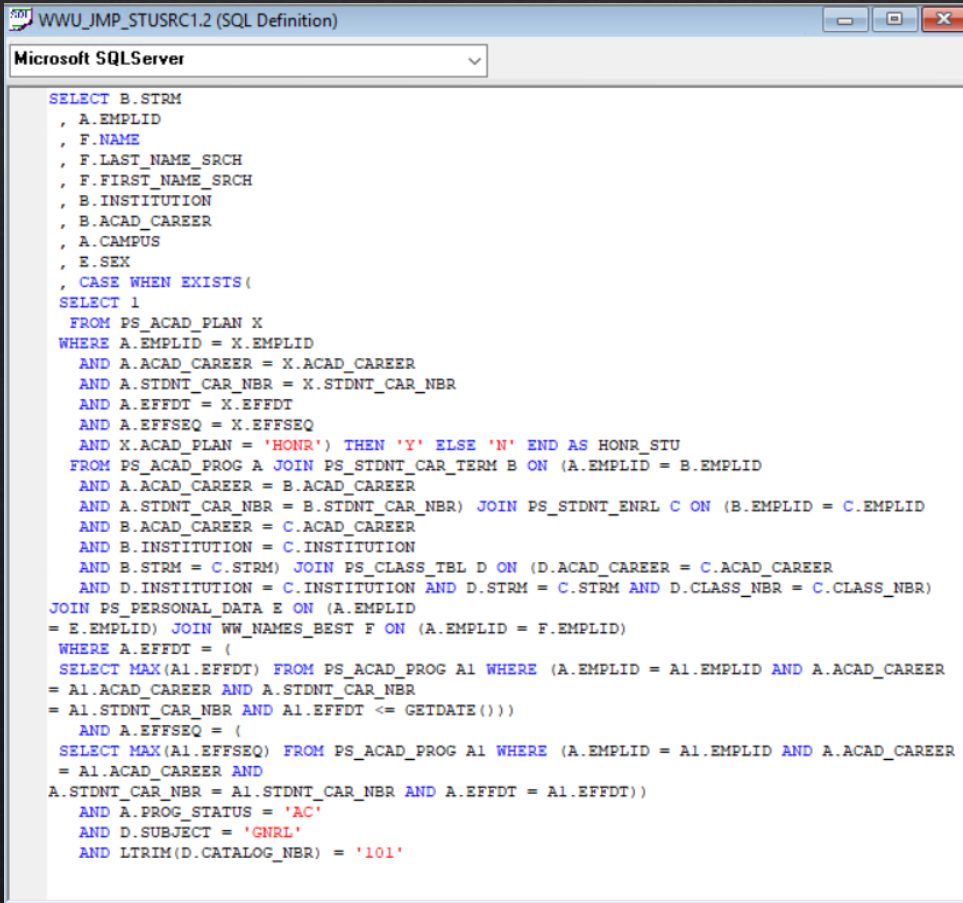
Student

Personalize | Find | First 1-305 of 305 Last

Emp ID | Student Name | Advisors | Meeting Details

Group Schedule

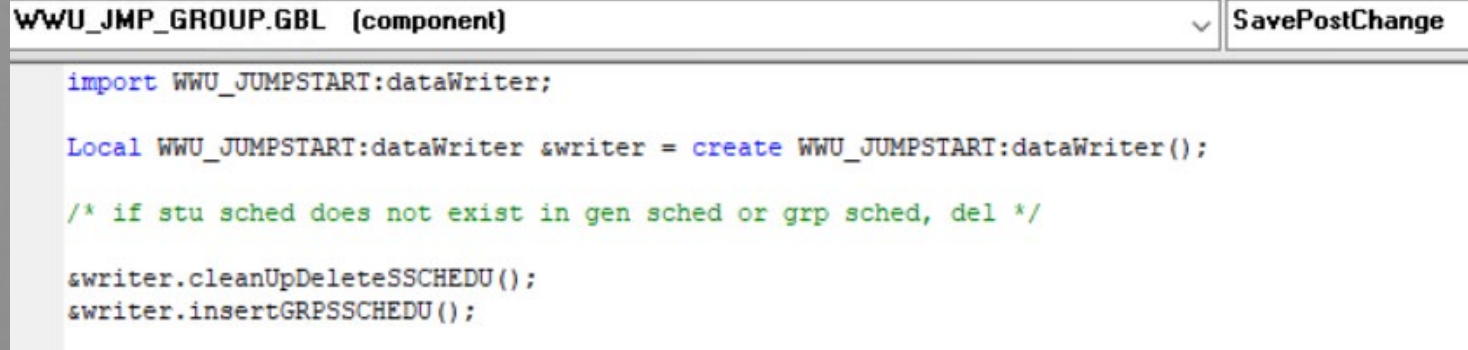
- Create group schedules
- Set student groups and group leader



```
SELECT B.STRM
, A.EMPLID
, F.NAME
, F.LAST_NAME_SRCH
, F.FIRST_NAME_SRCH
, B.INSTITUTION
, B.ACAD_CAREER
, A.CAMPUS
, E.SEX
, CASE WHEN EXISTS (
SELECT 1
FROM PS_ACAD_PLAN X
WHERE A.EMPLID = X.EMPLID
AND A.ACAD_CAREER = X.ACAD_CAREER
AND A.STDNT_CAR_NBR = X.STDNT_CAR_NBR
AND A.EFFDT = X.EFFDT
AND A.EFFSEQ = X.EFFSEQ
AND X.ACAD_PLAN = 'HONR') THEN 'Y' ELSE 'N' END AS HONR_STU
FROM PS_ACAD_PROG A JOIN PS_STDNT_CAR_TERM B ON (A.EMPLID = B.EMPLID
AND A.ACAD_CAREER = B.ACAD_CAREER
AND A.STDNT_CAR_NBR = B.STDNT_CAR_NBR) JOIN PS_STDNT_ENRL C ON (B.EMPLID = C.EMPLID
AND B.ACAD_CAREER = C.ACAD_CAREER
AND B.INSTITUTION = C.INSTITUTION
AND B.STRM = C.STRM) JOIN PS_CLASS_TBL D ON (D.ACAD_CAREER = C.ACAD_CAREER
AND D.INSTITUTION = C.INSTITUTION AND D.STRM = C.STRM AND D.CLASS_NBR = C.CLASS_NBR)
JOIN PS_PERSONAL_DATA E ON (A.EMPLID
= E.EMPLID) JOIN WW_NAMES_BEST F ON (A.EMPLID = F.EMPLID)
WHERE A.EFFDT = (
SELECT MAX(A1.EFFDT) FROM PS_ACAD_PROG A1 WHERE (A.EMPLID = A1.EMPLID AND A.ACAD_CAREER
= A1.ACAD_CAREER AND A.STDNT_CAR_NBR
= A1.STDNT_CAR_NBR AND A.EFFDT <= GETDATE()))
AND A.EFFSEQ = (
SELECT MAX(A1.EFFSEQ) FROM PS_ACAD_PROG A1 WHERE (A.EMPLID = A1.EMPLID AND A.ACAD_CAREER
= A1.ACAD_CAREER AND
A.STDNT_CAR_NBR = A1.STDNT_CAR_NBR AND A.EFFDT = A1.EFFDT))
AND A.PROG_STATUS = 'AC'
AND D.SUBJECT = 'GNRL'
AND LTRIM(D.CATALOG_NBR) = '101'
```

Code from snippet from SavePreChange testing for conflicts

```
For &k = 1 To &rs3.ActiveRowCount
If &rs3(&k).WWU_JMP_GROUPS.CATEGORY.Value = "" Then
Continue;
Else
&row3 = &rs3.GetRow(&k);
&schedule1 = &convertDIO.convertGRPSRowToGroupScheduleDTO(&row3);
If &conflictTest.isStudentCategoryConflictFoundWGRP(&schedule1, &GeneralSchedule) Then
&row3.WWU_JMP_GROUPS.END_TIME.Style = "PSERROR";
&row3.WWU_JMP_GROUPS.START_TIME.Style = "PSERROR";
Error ("Time conflict found with category instance.");
Else
&row3.WWU_JMP_GROUPS.END_TIME.Style = "PSEDITBOX";
&row3.WWU_JMP_GROUPS.START_TIME.Style = "PSEDITBOX";
End-If;
End-If;
End-For;
```



```
WWU_JMP_GROUP.GBL (component) SavePostChange

import WWU_JUMPSTART:dataWriter;

Local WWU_JUMPSTART:dataWriter &writer = create WWU_JUMPSTART:dataWriter();

/* if stu sched does not exist in gen sched or grp sched, del */

&writer.cleanUpDeleteSSCHEDU();
&writer.insertGRPSSCHEDU();
```

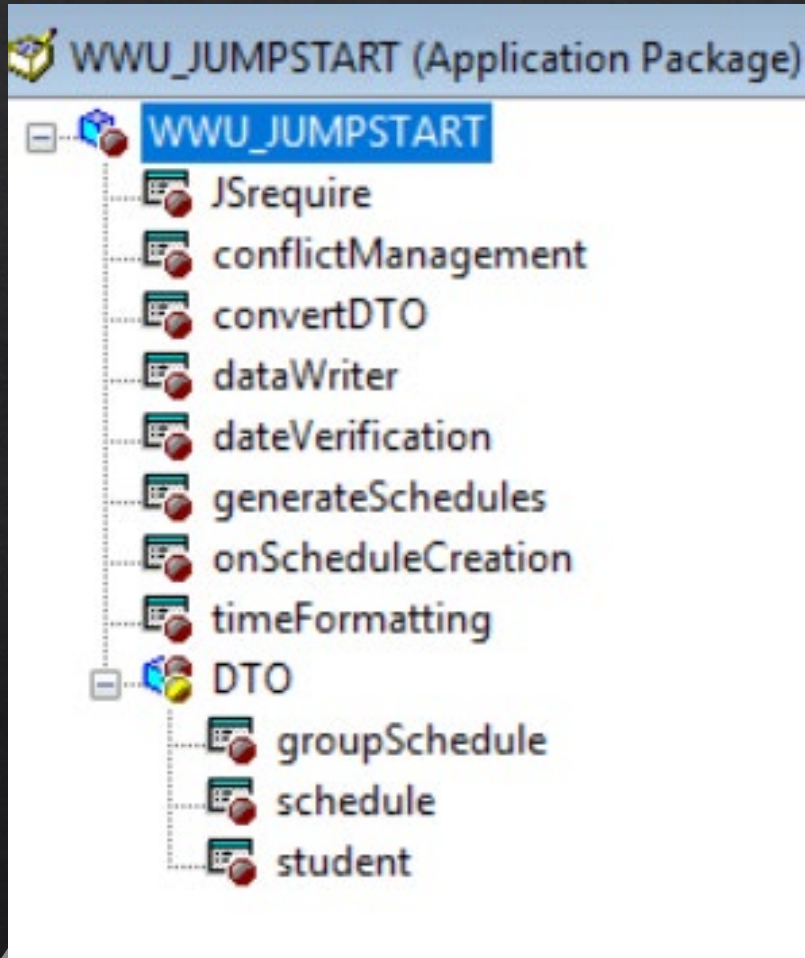
In SavePostChange it adds new items to student schedules and deletes off any which have been removed.

SQL for one of the views used for selecting students.

Student Schedule View

The Application Package holds much of the repeated code for this project.

- Individually edit student schedules
- Add advisor appointments



The screenshot displays the 'Student Schedule View' interface. At the top, there are tabs for 'Schedule' and 'Advisor Appointment'. Below the tabs, there is a redacted area and a 'JumpStart Term' of 2229. An 'Add Event' button is visible. The main area contains a table with the following columns: Date, Category Name, Instance Number, Start Time, End Time, Facility ID, Description, and Info. The table lists 10 events.

	Date	Category Name	Instance Number	Start Time	End Time	Facility ID	Description	Info
1	04/02/2023	AAAA	1	4:00AM	5:00AM	ADM210	Gen A General Session A	-
2	04/02/2023	AAAA	2	8:00AM	9:00AM	CSP215	Gen A General Session A	-
3	04/02/2023	BBBB	1	6:00AM	7:00AM	CTC311	Gen B General Session B	-
4	04/02/2023	CCCC	2	4:00AM	6:00AM	ADM205	INFO C Information C	-
5	04/02/2023	CCCC	3	7:00AM	10:00AM	CTC123	INFO C Information C	-
6	04/03/2023	CCCC	1	4:30AM	5:00AM	ADM201	INFO C Information C	-
7	04/03/2023	DDDD	3	4:30AM	5:00AM		Group D Group Activity D	-
8	04/03/2023	EEEE	1	10:00AM	2:00PM	CSP313	Breakout E Breakout Session Example	-
9	04/04/2023	AAAA	1	5:00AM	6:00AM	CSP165	Gen A General Session A	-
10	04/04/2023	AAAA	2	7:00AM	8:00AM	ADM208	Gen A General Session A	-

Navigation controls at the bottom include: Save, Return to Search, Previous in List, Next in List, and Notify. The footer shows 'Schedule | Advisor Appointment'.

Final Thoughts

- Working with a database
- Changes from the original system
- Learning new languages and software
- Building something to be passed on