

Utility

+ Utility()
+ initProjectPool(filename : string, projectPool[] : Project) : void
+ initStudentPool(filename : string, studentPool[] : Project) : void
+ initClassSectionPool(filename : string, classSectionPool[] : ClassSection) : void
+ initProjectStudentSkills(filename : string, projectPool[] : Project) : void
+ getSizeOfJson(filename : string, key : string) : int
+ getProjectXskill(projectPool[] : Project, i : int, j : int) : int
+ getSkillXstudent(studentPool[] : Student, i : int, j : int) : int
+ calcProjectXStudentMatrix(students : vector<Student>, projects : vector<Project>) : vector<vector<int>>
+ projectTypePartition(projectPool[] : Project, numProjects : int, t0 : char, t1 : char, t2 : char) : void
+ projectPriorityPartition(projectPool[] : Project, numProjects : int, t0 : int, t1 : int, t2 : int) : void
+ PriorityPartition(projectPool[] : Project, numProjects : int, t0 : int, t1 : int, t2 : int) : void
+ classSectionTypePartition(classSectionPool[] : ClassSection, numClassSections : int, t0 : char, t1 : char) : void
+ printIntMatrix(a : vector<vector<int>>) : void
+ ProjectToSectionPercentages(studentList : vector<vector<Student>>, projectList : vector<Project>, numProjects : int, NumOfClassSections : int) : int**
+ arrayProjectToSectionPercentages(projectPool[] : Project, studentPool[] : Student, classSectionPool[] : ClassSection, percentMatrix[] : int, numProjects : int, numStudents : int, numClassSections : int, numSkills : int) : void
+ projectToSectionAssignment(projectPool[] : Project, studentPool[] : Student, classSectionPool[] : ClassSection, numProjects : int, numStudents : int, numClassSections : int, numSkills : int, studentsInSections[] : int) : void
+ makeProjectJSON(numProj : int, numSkill : int) : void
+ makeProjectCSV(numProj : int, numSkill : int) : void
+ makeStudentJSON(numStud : int, numSkill : int, studentsFromCanvas : vector<vector<Student>>) : void
+ makeStudentCSV(numStud : int, numSkill : int) : void
+ calc_projects(numStudents : int, teamSize : int, minTeamSize : int) : int
+ NumOfTeamsOf4(int numStudents, int teamSize) : int
+ toCSVsse(string filename) : vector<vector<string>>
+ toCSVcse(string filename) : vector<vector<string>>
+ csvToProjectsVector(filename : string, projectPool[] : Project, numProjects : int) : vector<Project>
+ getQuizID(quizName : string, filename : string) : int
+ getAssignmentID(quiz_ID : int, filename : string) : int
+ getCategoryID(courseID : int, filename : string) : int
+ getGroupID(course_ID : int, filename : string) : int
+ getSurveyAnswers(students : vector<Student>, assignment_ID : int, filename : string) : vector<Student>
+ getStudentsFromJson(filename : string) : vector<Student>
+ ~Utility()

ClassSection

+ OfficialClassID:int
+ ClassID:int
+ Course_Name:string
+ Course_Code:string
+ Type:char
+ Enrollment:int

+ ClassSection()
+ ClassSection(cID:int, t,char)

MainWindow

+ num_projects : static int
+ num_students : static int
+ num_classes : static int
+ mwNumCourses : int

+ nextWindowFlag : bool
+ Authenticated : bool
+ mwProfile : string
+ studentsFromCanvas : vector<Student>

+ mwCourses : vector<ClassSection>
+ mwAllStudents : vector<vector<Student>>
+ mwCookies : vector<SoupCookie>

+ barCount : int

+ *progressWindow : FL_Window
+ *progressBar : FL_Progress
+ *progressBox : FL_Box
+ *TeamsButton : FL_Button
+ *doneButton : FL_Button
+ *imageBox : FL_Box
+ *terminalTextDisplay : FL_Text_Display
+ *terminalBuffer : FL_Text_Buffer
+ *windowMain : FL_Window
+ *nextWindow : FL_Window
+ *boxHeader : FL_Box
+ *buttonStart : FL_Button
+ *buttonOpenProject : FL_Button
+ *generateTeams : FL_Button
+ *inputprojects : FL_Int_Input
+ *inputstudents : FL_Int_Input

+ static_TeamsButtonClick(*w : FL_Widget, *data : void) : static void
+ static_ProgressTeamsButtonClick(*w : FL_Widget, *data : void) : static void
+ static_DoneButtonClick(*w : FL_Widget, *data : void) : static void
+ static_StartButtonClick(*w : FL_Widget, *data : void) : static void
+ ProgressTeamsButtonClick(*w : FL_Widget) : void
+ DoneButtonClick(*w : FL_Widget) : void
+ StartButtonClick(*w : FL_Widget) : void
+ handle(int) : int
+ TeamsButtonClick(*w : FL_Widget) : void

Team

+ attribute1.type = defaultValue
+ attribute2.type
+ attribute3.type

+ operation1(params):returnType
- operation2(params)
- operation3()

Project

+ attribute1.type = defaultValue
+ attribute2.type
+ attribute3.type

+ operation1(params):returnType
- operation2(params)
- operation3()

Student

+ attribute1.type = defaultValue
+ attribute2.type
+ attribute3.type

+ operation1(params):returnType
- operation2(params)
- operation3()

main

+ attribute1.type = defaultValue
+ attribute2.type
+ attribute3.type

+ operation1(params):returnType
- operation2(params)
- operation3()

Class

+ names[603] : string = {603Names}

GUIStyles

+ ASU_GOLD : const FL_Color = fl_rgb_color(255, 198, 39);
+ ASU_MAROON : const FL_Color = fl_rgb_color(140, 29, 64);
+ ASU_WHITE : const FL_Color = fl_rgb_color(255, 255, 255);
+ ASU_BLACK : const FL_Color = fl_rgb_color(0, 0, 0);

+ ASU_GREEN : const FL_Color = fl_rgb_color(120, 190, 32);
+ ASU_BLUE : const FL_Color = fl_rgb_color(0, 163, 224);
+ ASU_ORANGE : const FL_Color = fl_rgb_color(255, 127, 50);
+ ASU_GREY : const FL_Color = fl_rgb_color(92, 102, 112);

+ DARK_BRASS : const FL_Color = fl_rgb_color(165, 110, 6);
+ DARK_GREY : const FL_Color = fl_rgb_color(58, 58, 58);
+ DARK_TAUPE : const FL_Color = fl_rgb_color(74, 58, 27);
+ CREAM : const FL_Color = fl_rgb_color(230, 213, 185);
+ LIGHT_CREAM : const FL_Color = fl_rgb_color(240, 238, 214);
+ SP_GREEN1 : const FL_Color = fl_rgb_color(143, 147, 116);
+ SP_GREEN2 : const FL_Color = fl_rgb_color(86, 97, 87);
+ GREY_BLUE : const FL_Color = fl_rgb_color(92, 103, 119);
+ RUST : const FL_Color = fl_rgb_color(143, 67, 43);
+ DARK : const FL_Color = fl_rgb_color(56, 47, 39);

ClassSectionJson

+ attribute1.type = defaultValue
+ attribute2.type
+ attribute3.type

+ operation1(params):returnType
- operation2(params)
- operation3()

DataEntryGUI

+ courses[17] : string = {"2020Fall-X-SER401-90586", "2019Fall-X-SER401-80888", "2020Fall-X-SER401-84566", "2019Fall-X-SER401-91286", "2020Fall-X-SER401-70346", "2018Fall-X-SER401-65686", "2018Fall-X-SER401-52586", "2020Spring-X-SER401-43586", "2020Spring-X-SER401-65686", "2018Spring-X-SER401-93286", "2020Spring-X-SER401-45586", "2019Fall-X-SER486-21686", "2019Fall-X-SER455-10286", "2019Fall-X-SER423-45336", "2018Summer-X-SER530-14186", "2019Summer-X-SER219-10986", "2020Summer-X-SER323-55536",}
+ *AllCoursesNames : string
+ *SelectedCourseNames : string

+ num_of_all_courses : int
+ num_of_selected_courses : int
+ course_count : int
+ *masterWindow : FL_Window
+ *prevWindow : FL_Window

+ *boxHeader : FL_Box
+ *boxHeader2 : FL_Box
+ *classBrowser : FL_Check_Browser
+ *findCourses : FL_Button
+ *Confirm : FL_Button
+ *goBack : FL_Button
+ *inputYear : FL_Input
+ *inputSemester : FL_Input_Choice
+ *classSectionInstructionsBox : FL_Box
+ *scroll : FL_Scroll

+ *backWindow : FL_Window
+ *yesButton : FL_Button
+ *cancelButton1 : FL_Button

+ *confirmWindow : FL_Window
+ *GenerateTeamsButton : FL_Button
+ *cancelButton2 : FL_Button

+ *projectFileInstructionsBox : FL_Box
+ *projectFileChooserButton : FL_Button
+ *fileInput_Project : FL_Input

+ *quizFileInstructionsBox : FL_Box
+ *fileInput_StudentQuizName : FL_Input

+ *goBackorConfirmInstructionsBox : FL_Box

+ DataEntryGUI(*win : FL_Window, cookiedata : vector<SoupCookie>)
+ ~DataEntryGUI() : virtual

+ BrowserSelection(*w : FL_Widget) : void
+ FindCoursesClick(*w : FL_Widget) : void
+ GobackClick(*w : FL_Widget) : void
+ ConfirmClick(*w : FL_Widget) : void
+ YesClick(*w : FL_Widget) : void
+ CancelClick1(*w : FL_Widget) : void
+ CancelClick2(*w : FL_Widget) : void
+ GenerateTeamsClick(*w : FL_Widget) : void
+ chooseProjectFile_cb(*w : FL_Widget) : void

+ static_BrowserSelection(*w : FL_Widget, *data : void) : static void
+ static_FindCoursesClick(*w : FL_Widget, *data : void) : static void
+ static_GobackClick(*w : FL_Widget, *data : void) : static void
+ static_ConfirmClick(*w : FL_Widget, *data : void) : static void
+ static_GenerateTeamsClick(*w : FL_Widget, *data : void) : static void
+ static_CancelClick1(*w : FL_Widget, *data : void) : static void
+ static_CancelClick2(*w : FL_Widget, *data : void) : static void
+ static_YesClick(*w : FL_Widget, *data : void) : static void
+ static_chooseProjectFile_cb(*w : FL_Widget, *data : void) : static void