AddModule.xaml

- -Modules module
- -ModuleController moduleController
- -Calc calculations

- +AddModule() : constructor
- -async btn_addClick : void
- -async btnUpdateModule_Click

Dashboard.xaml

- -connstring: string
- -DashboardController dash_contr

- +Dashboard() : constructor
- -Border_Loaded: void
- -async scheduler_tick : void
- -async Get_SemesterData() : task
- -async Highest_Time() : task
- -async Lowest_Time() : task
- -btnModule_Click() : void
- -tbModulesLink_MouseDown() : void
- -tbAddModulesLink_MouseDown(): void

ViewModules.xaml

- -const connString: str
- -ModuleModel module_model
- -ModuleInfo module_info
- -DisptacherTimer scheduler
- -Student_Number: getter, setter

- +VieModules(): constructor
- -Page_Loaded(): void
- -async scheduler_Tick(): void
- -async tbSearch_MouseDown(): void
- -async Get_Modules(): Task<List<ModuleInfo>>
- -async Count_Modules() : Task<int>
- -async Count_Credits() : Task<int>
- -async Average_Hours() : Task<int>
- -tbRemoveModule_MouseEnter() : void
- -tbRemoveModule_MouseLeave(): void
- -async tbRemoveModule_MouseDown(): void

DashboardController

- -currentYear : int
- -highest_time: int
- -lowest_time: int
- -semester_length : int
- -semesterStartDate: str
- -highest_module: str

- +DashbaordController(): constructor
- + <<Property>> Current_Year: int { get; set;}
- + <<Property>> Highest_Time: int { get; set;}
- + <<Property>> Lowest_Time: int {get; set;}
- +<<Property>> Highest_Module: str{ get; set;}
- +<<Property>> Semester_Length: {get; set;}
- +<<Property>> Semester_Start_date: str{ get; set;}
- +PropertyChangedEventHandler

LoginController

- -connString: str

- +async Login: Task<bool>
- +Valid_Input(): bool

ModuleController

- -const connString: str

- +async Module_Exists(): Task<bool>
- +async Add_Module(): Task
- +async Get_Studied_Hours(): Task<int>
- +Subtract_Hours(): int
- +async Update_Module_Hours: Task

ModuleModel: <List>

StudentController

- +const connString: str
- -<<Property>> User_Exists: bool{get; set;}

- +Validate_FullName(): bool
- +Validate_Email(): bool
- +Validate_Password(): bool
- +IsMatched(): bool
- +Valid_StudentNumber(): bool
- +Valid_Credentials(): bool
- +async Create_Student(): Task<bool>
- +async User_exists(): Task<bool>

ModuleInfo

- -student_number: str
- -moduleCode: str
- -moduleName: str
- -moduleCredit: int
- -studyHoursRemaining: int
- -modulecount: int
- -totalcredits: int
- -average_time: int

- +<<Property>> Student_Number: str {get; set;}
- +<<Property>> Module_Code: str{get; set;}
- +<<Property>> Module_Name: str{get; set;}
- +<<Property>> Module_Credit: int {get; set}
- +<<Property>> ModuleCount: int{get; set;}
- +<<Property>> Total_Credits: int{get; set;}
- +<<Property>> Average_Time: int{get; set;}
- +<<Property>> Study_Hours_Remaining: int{get;set;}
- -PropertyChanged: void

Modules

- -student_number: str
- -moduleCode: str
- -moduleName: str
- -moduleCredit: int
- -studyHoursRemaining: int

- +<<Property>> Student_Number: str {get; set;}
- +<<Property>> Module_Code: str{get; set;}
- +<<Property>> Module_Name: str{get; set;}
- +<<Property>> Module_Credit: int {get; set}
- +<<Property>> ClassHours: int {get; set}
- +<<Property>> SemesterLength: int {get; set}

CustomModuleHours

-student_number: str
-moduleCode: str

+<<Property>> Student_Number: str {get; set;}
+<<Property>> Module_Code: str{get; set;}
+<<Property>> Hours_Studied: int{get; set;}

Security

+Hash_Password(): str

Student

-studentName: str
-studentEmail: str
-studentPass: str
-studentConfirmPass: str
-studentNumber: str
-validCredentials: bool
-studentExists: bool
-RegSuccessful: bool

+<<Property>> Student_Number: str {get; set;}
+<<Property>> Student_FullName: str {get; set;}
+<<Property>> Student_Email: str {get; set;}
+<<Property>> Student_Password: str {get; set;}
+<<Property>> Student_cnfPass: str {get; set;}
+<<Property>> Valid_Credentials: str {get; set;}
+<<Property>> Registration_Successful: str {get; set;}

Login

-LoginInfo login_info
-Login_Controller login_Ctrl

-async tbLogin_MouseDown(): void
-tbLink_MouseDown(): void

Navigation

+Student_Email: {get; set;}

-tbDashboard_MouseEnter(): void
-tbDashbaord_MouseLeave(): void
-tbDashboard_MouseDown(): void
-tbViewModule_MouseEnter(): void
-tbViewModule_MouseLeave(): void
-tbViewModule_MouseDown(): void
-tbAddModule_MouseEnter(): void
-tbAddModule_MouseLeave(): void
-tbAddModule_MouseDown(): void
-Border_Loaded(): void
-lblUser_MouseDown(): void

Register

-Student student
-StudentController studentController

-TbRegister_MouseLeave(): void
-TbLogin_MouseEnter(): void
TbLogin_MouseLeave(): void
-async TbRegister_MouseDown(): void
-TbLogin_MouseDown(): void

MainWindow

-lblClose_MouseDown(): void
-Border_MouseDown(): void
-frmView_Navigating(): void