

CRC CARDS

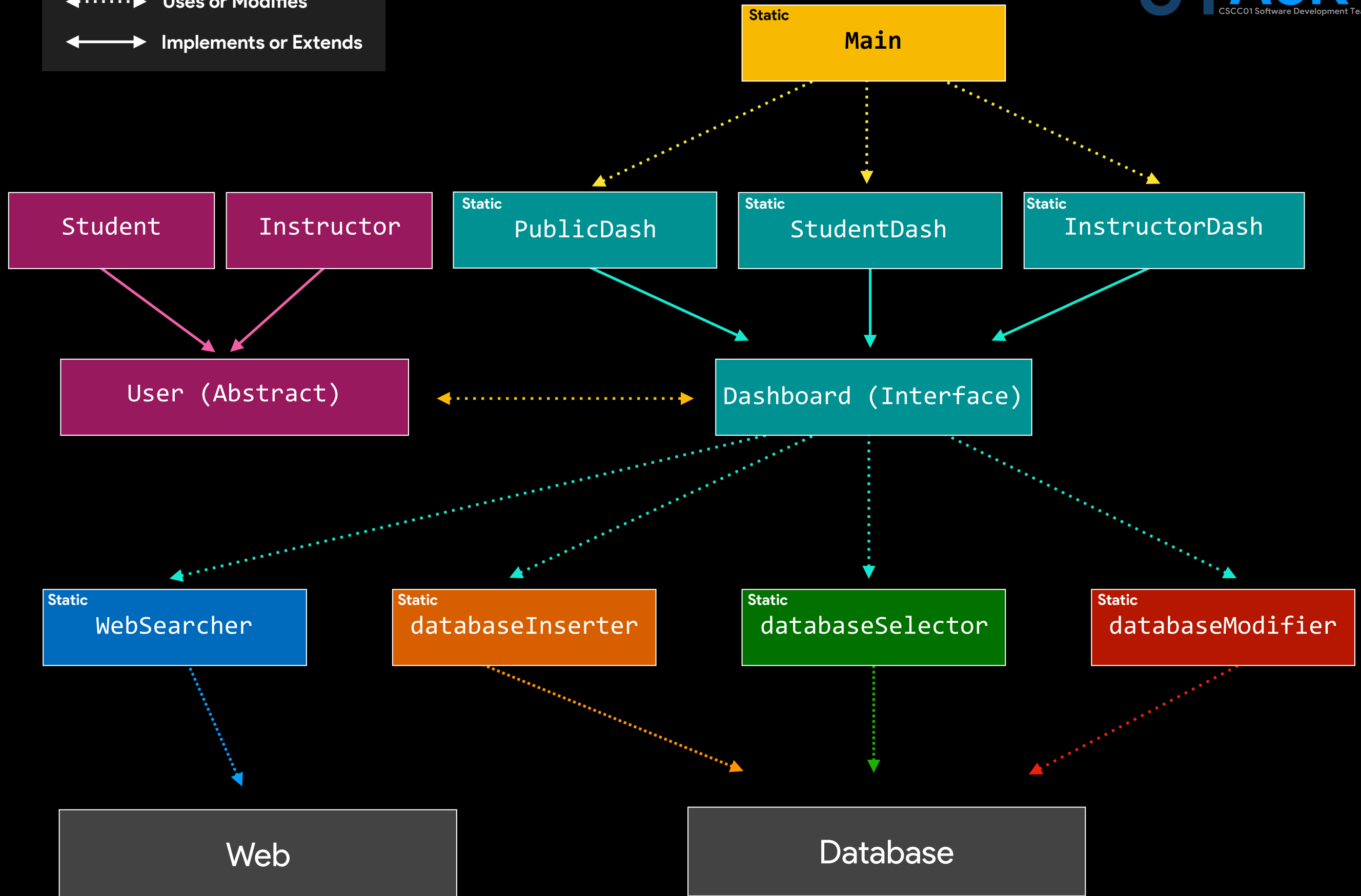
By Kara Autumn Jiang

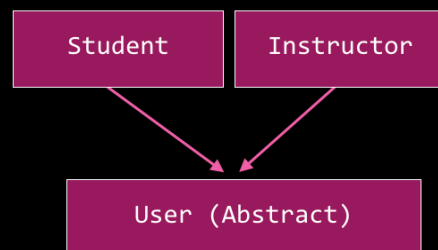
U^{OF}TASK
CSCC01 Software Development Team

Relationship Key

◄.....► Uses or Modifies

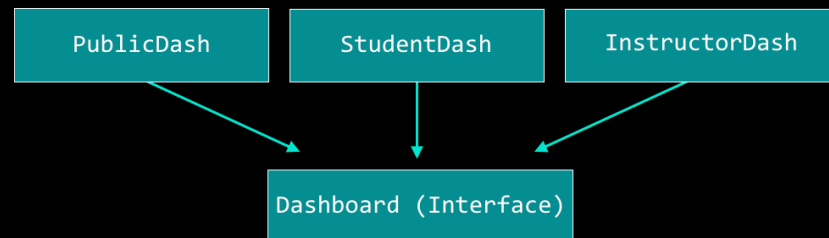
◄=====► Implements or Extends





User Classes

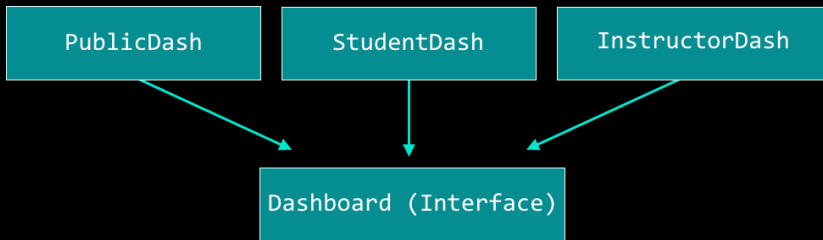
User (Abstract Class)	
Subclasses	Implemented by: Student , Instructor
Responsibilities	Defines universal parameters and permissions, represents user accounts, used when creating/authenticating users, gives permission to access indexed files in UTask drive
Collaborators	Used by Dashboard when creating and logging users in/out.
Student	
Superclasses	User
Responsibilities	Implementation of the student account, gives students basic web and drive search functionality, tracks student timetable and courses, used for login to access StudentDash
Collaborators	Used to access/exit StudentDash upon authentication
Instructor	
Superclasses	User
Responsibilities	Implementation of the instructor account, gives instructors basic web and drive search functionality as well as ability to add indexed files to Drive, used for login to access InstructorDash
Collaborators	Used to access/exit InstructorDash upon authentication



Dashboard Classes

Static	Dashboard (Interface)
Subclasses	Implemented by: PublicDash , StudentDash , InstructorDash
Responsibilities	Defines universal methods to be implemented by subclasses classes that implement Dashboard, to be used by Main to provide Users with a platform on which to work
Collaborators	Different implementations to be accessed by corresponding Users upon authentication, invoked by Main

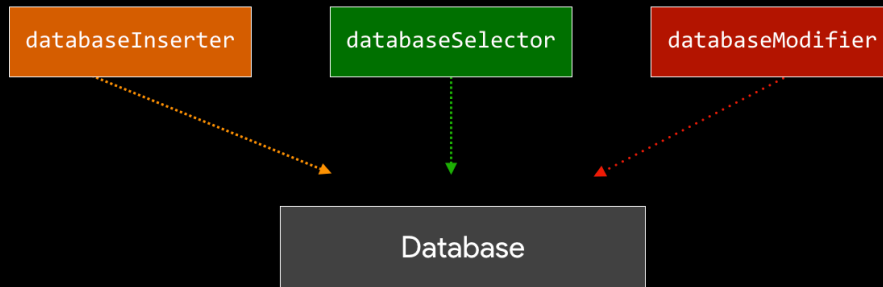
Static	StudentDash
Implements	Dashboard
Responsibilities	Authenticates Students , provides web/drive search functionality with advanced options under Student permissions, provides web storage functionality without indexing option, displays Student timetable, allows for modification to Student accounts.
Collaborators	Authenticates/De-authenticates Student accounts, uses WebSearcher to search the web, uses DatabaseSelector to search indexed files in the database, uses DatabaseModifier to edit Student account details in the database



Dashboard Classes

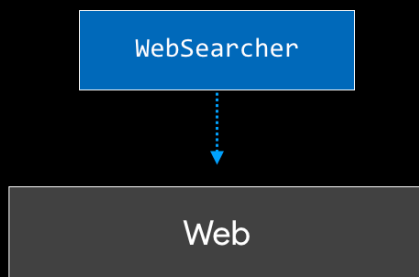
Static	InstructorDash
Implements	Dashboard
Responsibilities	Authenticates Instructors , provides web/drive search functionality with advanced options under Instructor permissions, provides web storage functionality with option to index/un-index certain files, allows for modification to Student and Instructor accounts.
Collaborators	Authenticates/De-authenticates Instructor accounts, uses WebSearcher to search the web, uses DatabaseSelector to add indexed files to the database, uses DatabaseSelector to search indexed files in the database, uses DatabaseModifier to edit User account details in the database or delete/modify indexed files in Drive.

Static	PublicDash
Implements	Dashboard
Responsibilities	Allows un-authenticated users to perform web-only searches (No access to view or edit indexed files in drive), Allows users to authenticate as Student or Instructor or create a new account as either Student or Instructor .
Collaborators	Creates or Authenticates Student and Instructor accounts, uses WebSearcher to search the web, uses DatabaseSelector to check if an account exists, uses DatabaseInsertor to add new Student or Instructor accounts to the database



Database Classes

Static databaseInsertor	
Responsibilities	Inserts new User accounts or files (both indexed and non-indexed) into their respective tables in the database
Collaborators	Used by Dashboard implementing classes to write data
Static databaseSelector	
Responsibilities	Retrieves User accounts and files (both indexed and non-indexed) from their respective tables in the database depending on usage
Collaborators	Used by Dashboard implementing classes to retrieve data
Static databaseModifier	
Responsibilities	Modifies User accounts and files (both indexed and non-indexed) from their respective tables in the database depending on usage
Collaborators	Used by Dashboard implementing classes to retrieve data, uses databaseSelector to check if the data to modify exists in the database



Web Classes and Main

Static	webSearcher
Responsibilities	Returns filtered web search results as to retain relevance to the University of Toronto according to User web-search query
Collaborators	Used by Dashboard implementing classes to search the web

Static	Main
Responsibilities	High-level link to all elements of the application, provides a console-application to test functionality, provides access to implementations of Dashboard depending on User type and authentication status
Collaborators	Used by Dashboard implementing classes to authenticate Users

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