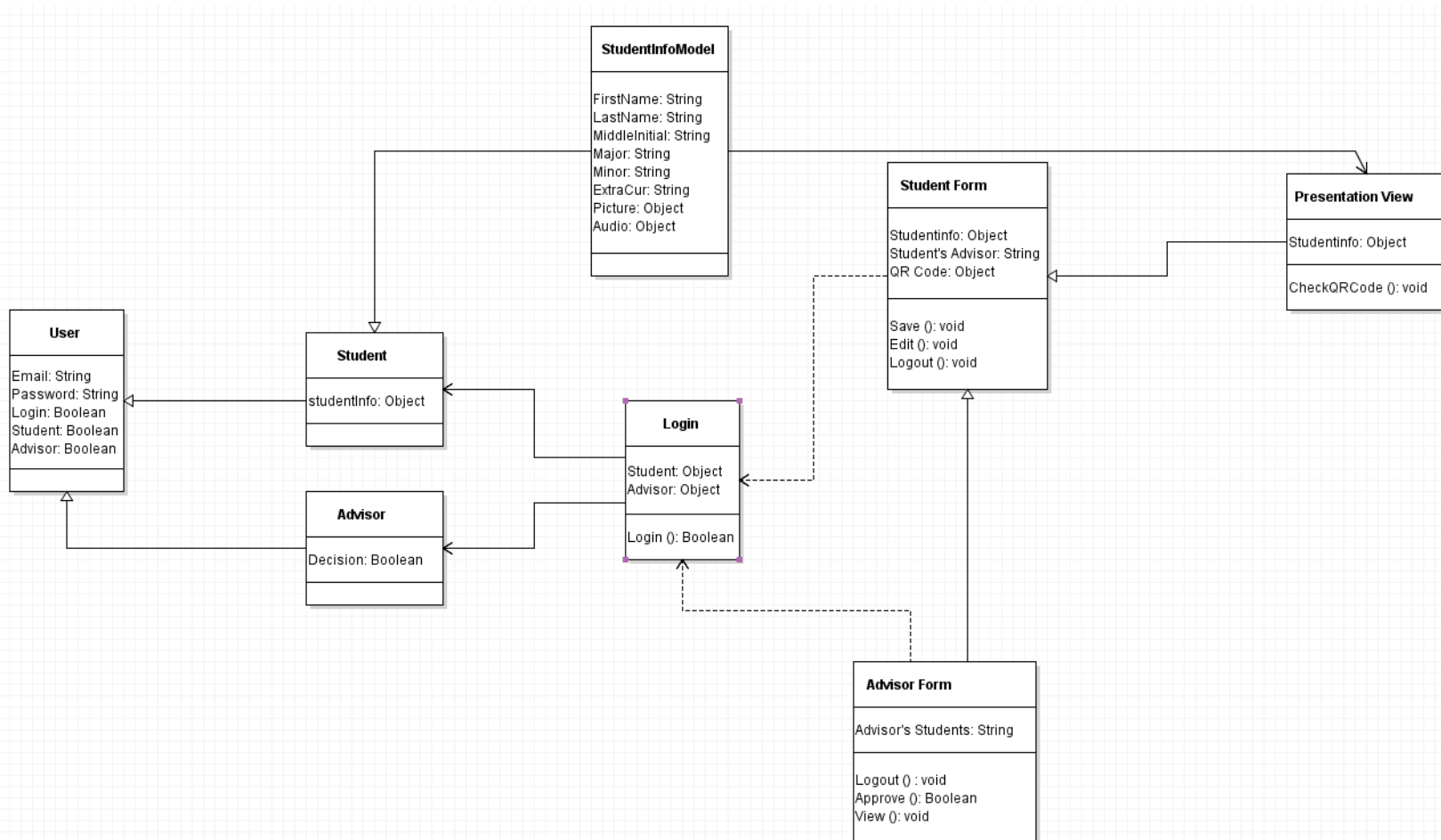Problem Domain Analysis

CS320: Software Engineering & Design, Spring 2022

Due: 3-13-2022

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Methods   Classes   Attributes   Unused

Nouns	Verbs
Student Advisor User Form Graduation Server Email Password student login	Logs in Verifies Presents Fills out Submits Sends Opens Approves Creates emails

The classes we modeled are the most important because they are needed to run our project in a bare bones state. The user class is the core class of our project because our project revolves around a user, either a student or advisor. Both the student and advisor classes inherit the getters and setters from the user class. The user class contains the login information for each student and advisor as well as boolean variables to see whether the user should have advisor permissions or not. The student class contains a student information object that will be used to store the information the student submits on the form. The advisor class has a decision boolean that will be true or false depending on whether the advisor approves the information a student submits. A login class is included in the diagram because the login process is associated with both the students and advisors. This is why the class has a student object and an advisor object. The login method in this class will check for a valid username and password. The method will also check to see if the user is a student or advisor and redirect them accordingly. The student form class is for housing the information on the form and the key characteristics of the form. For the student form, it has a student information object, an advisor string that will show what advisor is responsible for the student, and a QR code object so the student can access their information during graduation. The form will also have a logout method for security purposes. For ease of use, the form will have save and edit methods so the student can change or add information as the deem necessary. Finally the advisor form class will contain the things necessary for the advisor's form. The advisor's form will be different from the student form because the advisor's job is to preview and approve a certain student's content. To determine which students belong to which advisor a string of student's names will be in the class, probably in the form of an arraylist. The advisor form class will also include a logout function for security

reasons, like the student form class. It will also contain an approve and a view method for viewing a student's submission and approving it or not.