OVERVIEW: Classes are Student, Professor, Application, Section.

Student and Professor each have Username and Password attributes.

Student has Application, Professor has Section.

- ○ Application has Student, Section has Professor.

Section Object has separate attributes for Day and Time to conveniently compare against student's preferred days and times.

SUPERCLASS: USER [HAS] Student or Professor

ATTRIBUTE: Username (String)

ATTRIBUTE: Password (String)

ATTRIBUTE: Child (Object of type Student or Professor)

METHODS: getUsername, getPassword, getChild.

CLASS: Student [HAS] Application

ATTRIBUTE: Application (Object)

ATTRIBUTE: Conflict sections (list of Objects of type Section)

ATTRIBUTE: Preferences (list of Objects of type Section)

METHODS: getApplication.

CLASS: Professor [HAS] Sections (list)

ATTRIBUTE: Sections (list of Objects of type Section)

ATTRIBUTE: Preferences (list of Objects of type Student / Application)

METHODS: getSections.

CLASS: Application [HAS] Student

ATTRIBUTE: Name (String)

ATTRIBUTE: Year (String)

ATTRIBUTE: GPA (Float)

ATTRIBUTE: Grade in 320 (Char)

ATTRIBUTE: References (List of name-contact / String-String pairs)

ATTRIBUTE: Resume Attachment (File? List of files?)

ATTRIBUTE: Student (Object of type Student)

METHODS: getName, getYear, getGPA, getGradeIn320, getAttachment(s), getReferences.

CLASS: Section [HAS] Professor

ATTRIBUTE: Section Number (Integer)

ATTRIBUTE: Day (String)

ATTRIBUTE: Time (String)

ATTRIBUTE: Professor Name (String)

ATTRIBUTE: Capacity (Integer)

ATTRIBUTE: numEnrolled (Integer)

ATTRIBUTE: Professor (Object of type Professor)

METHODS: getSectionNumber, getDay, getTime, getProfessorName, getCapacity, getNumEnrolled.

MAIN CLASS: not an Object class, just the main class where everything else is called from.

ATTRIBUTE: applicationsList -- holds all Objects of type Application (for when the Professors want to see the application pool in some way).

ATTRIBUTE: sectionsList -- holds all Objects of type Section (for the potential Announcement page).

ATTRIBUTE: Matchings (list) -- this will store the final Student-Section matching.

METHOD: createMatching -- this is the matching algorithm.