Assignment 3 - Requirements

Chris Bigge - cbpcm

1.) The different type of users of the software system include the following:

- Programming Students
- Teaching Assistants
- Professors

2.) Activities for each user listed above:

- Programming Students
  - View all of their available assignments with the due date for each
  - View their TA and professor info
  - They should be able to upload and submit any file(s) to the platform under a specific assignment
  - Optionally add submission comments with the file(s)
  - The platform should give them feedback that their file submission has worked properly and give them a view of the submitted assignments
  - They should be able to see their code, with syntax highlighting, in the specific assignment.
- Teaching Assistants
  - View all of the assignments for their section(s) with their due date and how many students have submitted each assignment out of the total number of students in the class
  - See each assignment's submissions for their section of students with the student's info attached to it
  - Ability to export or print the assignemnts and see which specific students haven't submitted anything.
- Professors
  - Ability to create new assignments that TAs and students can view from their dashboard
  - Assign specific TAs to the specific sections

- Create or delete sections
- Access, view, and change grades for all of the student's assignments
- Have a dashboard where they can see all of their assignments and statistics for each assignment, filterable by section
- See which specific students haven't submitted assignments.

3.) Relevant data and contraints for each activity:

- Assignment
  - title, unique
  - description
  - due date
  - status(open, closed)
  - CONSTRAINT on status based on due date
- Person
  - name(first, middle, last)
  - title
  - email, must be unique
  - phone(optional)
- Submission
  - title
  - content
  - programming language
  - date submitted
  - comment
  - submitter PersonalInfo, must match a PersonalInfo object with the title of student
  - CONSTRAINT - check assignment status to make sure open before submission goes through

4.) Infrastructure requirements:

- This system will be built as a web application. It will require a server to be run on that has an operating system that can run and manage a scalable web server.
- The system will also need a database to store the data used by the web application.

- Fast short term and long term storage with high capacity will be important for this web applciation to function well.