* An overall description of the project - what will your project do? What are the basic features?
  + The project name is “School Grade Book”. The end result of this project will be a gradebook for teachers. This gradebook will allow teachers to track students names, the class they’re enrolled in, assignments/their corresponding grade, and overall aggregated grade. Functionality wise, the teacher should be able to view and edit grades as needed, add or remove students, sort, and login via a password protected site.
* What is the basic design of your project? How is the code structured? Are you using, or do you anticipate using python classes and objects? Describe the classes and their basic features.
  + The website can be accessed by teachers via a password protected login. From there teachers will be able to navigate to the student roster to see the details like name, grade, class.
  + The project will be hosted at schoolgradebook.pythonanywhere.com and developed using in-build code editor provided by the pythonanywhere.com
  + Using BootStrap 4.0, HTML5, CSS, JavaScript, JQuery, Ajax, python 3.7, Flask API, SQLAlchemy, mySql database and creating “schoolgradebook” virtual environment to store all our libraries
  + Jinja 2 template engine will be used, FLASK API libary’s, Using RSETful Web Services with FLASK, we will be implementing authorization, authentication and maintain session management
  + To secure our user’s credentials, using werkzeug.security library will be hashed inside the database
  + MySQL database will be utilized for storing all our data for the School GradBook project data
  + The source control will be github - <https://github.com/bhuppal/SchoolGradeBook>
  + We will be using SQLAlchemy Object Relational Mapper to translate python programming language to classes syntax to create following tables into our schoolgradebook database
    - Instructor - stores all information related to instructor
    - Course - To create and maintain course details
    - Student - Student details will be maintained
    - Assignment - Assignment details are stored
    - Student\_assignment - Student assignment details are maintained
    - Grade - Grade for each courses will be maintained
    - Student\_Grade - Student grades are maintained
    - User - User’s username, password and user type will be maintained
  + All project documentation are maintained at github
* What are the roles and responsibilities of the project team (who is doing what? ). How will you keep from duplicating effort?
  + To avoid duplication the team is utilizing github to track updates and progress. The work is split with Cindy focusing on the write-up, and UI/layout, client-side validation & coding while Bhuppal is focusing on the database and backend work. Both team members are collaborating on project planning and overall database design.
  + To avoid duplicate effort, as a team members we will be using github repository source control using <https://github.com/bhuppal/SchoolGradeBook>
* How will the project team work together? Will you meet in person or will you do web conferences? Please be as specific as you can.
  + The team has met via google hangouts, and have shared phone numbers in case pertinent questions come up while working on the project. When questions aren’t urgent the team keeps in touch via email.
  + The team collaborated on the project abstract via google docs, and plans to do the same for the write-up portion of the assignment.
* What is the schedule and timeline for your project?
  + The team has a personal deadline set ahead of the May 22nd due date to allow for testing and troubleshooting. Week 1 consisted of project planning, github creation, and groundwork in python anywhere. Weeks 2 - 4 will focus on database design, UI and backend work, write-up creation, editing, and testing.
* How will you test your project?
  + Cindy and Bhuppal will both personally test the project throughout the creation process to ensure that it is working as the project progresses.
  + We will be using Postman tool to check FLASK API request and response. <https://www.getpostman.com/tools>
  + We will be using web browser developer tool to test our project
  + In addition to this, they will ask friends/family to test the project via test logins.