1 Project 1: Personal Information Manager

- **Required technologies:** Javascript, JQuery, CSS, Hibernate, Spring MVC
- **Required steps:**
  - registration/login of users in the system
  - insertion of personal information (e.g., documents, credit cards, . . .)
  - management of passwords
    - insertion of a password and link of the password to a website/application
    - random generation of a password, whose length must be comprised between 4 and 50 characters
      - containing only letters (e.g., hesbxJArq)
      - containing only letters and numbers (e.g. hde2ugewShf13)
      - containing letters, numbers and special characters (e.g. ads_yeg-3kjp94b)
      - containing specific words (e.g. tree212uy8_house contains tree and house)
    - visualization of the list of all websites/applications whose passwords have been stored
    - the user has to insert a master password to show the password for a specific website/application
    - redirect & automatic login on the web pages for which a password has been set (if possible)
- **Students:** Bilal Khan, Arturo Guerrisi, Mohamed Osman Raouf, Mostafa Sheikhalishahi

2 Project 2: Pizza Manager

- **Required technologies:** Javascript, JQuery, CSS, Hibernate, Spring MVC
- **Required steps:**
  - registration/login of users in the system
  - registration/login of restaurants in the system
  - a user can:
    - see the available restaurants nearby
    - see the pizzas prepared by each restaurant
    - book (and eventually pay) a number of pizzas to available restaurants
    - book a table
    - see the time required by the restaurants for preparing the order (computed accordingly to the number of booking of the restaurant)
    - rate each restaurant (following 3 parameters: quality/fastness)
  - a restaurant can:
    - dispatch the orders
    - add pizzas to the menu
    - add/remove orders (in case of removal send an email to the user)
    - management of tables
    - management of payments
- **Students:** Marco Cosentino, Moiz Khan, Francesco Cosco, Danilo Ruffolo, Davide Gallo

3 Project 3: Class Manager

- **Required technologies:** Javascript, JQuery, CSS, Hibernate, Spring MVC
- **Required steps:**
  - registration/login of professors in the system
  - registration/login of students in the system
  - a professor can:
    - create a new class
    - send invitation to/accept students
    - add place and date of lectures
    - load/evaluate homeworks (PDF, DOC, PLAIN TEXT, LINKS)
    - answer to the questions of students
    - assign scores to students (for each homework and for exams)
    - manage the attendances of students
    - visualize statistics on scores/attendances/. . .
    - send communications (email and on the website) to students
  - a student can:
    - require the registration to the class
    - visualize the hours of his/her lectures
    - visualize and load homeworks (PDF, DOC, PLAIN TEXT, LINKS)
    - ask/answer to questions
    - check the number of attendances
    - show his scores and statistics
    - use an editor and a console for several programming languages (C++, Java, Javascript, . . .). (Suggestion: several javascript libraries can help you for writing the editor, e.g. look at https://highlightjs.org/)
  - bonus:
    - real time blackboard
- **Students:** Alessandro Cozza, Serafino D'Angelillo, Francesco Maida, Aldo Marzullo, Luigi Olivella