## **Software Architecture Description**

- The website class will contain the following attributes:
  - Photos of the bluffs for the system to catch any differences
  - Weather report because it can cause rockslides
  - Train capacity lets the operators know how many people there should be if an evacuation were to happen
  - The alarm alarms the lifeguards and operators by sending a message

All of these attributes can be accessed by using the get() method for each.

- The weather class has the temperature and condition and will alarm if the condition is bad.
- In the passenger class, the attributes include:
  - All personal information such as name, age, email, address, and account number
  - Allows them to open an account by requesting the user's personal information
  - Can also close the account if they want
- After creating an account, they can purchase train tickets by providing their payment information in the payment class.
  - User must input their ID, CustomID, and CCV number of card
  - Can pay for a ticket or get a refund
- Under the security class, the attributes would be:
  - The website, alarm, and location of which area within the 300 feet bluffs have been affected
  - This will then be passed to the safety class
- The safety class is how the lifeguards, ambulance, and security will be alerted and is sent the location where the rocks are unstable. These people can access the main website and passenger data for safety.
- Meanwhile, all the data from the weather, safety, website, passenger, and payment classes are stored in the storage class.
  - Photos accumulated and timeline will be saved up in the storage for one year
  - Total capacity saves the total capacity of each train
  - The report is where the rating system occurs.
  - 0 = no noticeable changes
  - 1-3 = subtle changes, but not dangerous
  - 4-5 = significant changes and information is sent to the security and safety classes to alert the lifeguards and operators