**Project Checklist**

1. General

1.1 Use reasonable variable convention.  
1.2 all the code is easily understood.

1.3 code is high cohesion.

1.4 code is low coupling.  
1.5 code is reusable.

1. Security
   1. All inputs are checked (correct type, length, format, and range) and encoded.
   2. All outputs are checked (correct type, length, format, and range) and encoded.
2. Performance
   1. Use build-in function as much as possible.
   2. Find out if there are any obvious optimization can be used for better performance.
3. Documentation

4.1 Reasonable comments and description.  
4.2 Comment all functions.

4.3 Describe unusual codes.  
4.4 Explain data structures.  
4.5 Describe unit of values (dollar, day, month, year, hour, minutes, second number of people…).

1. Testing  
   5.1 The code should be structured so that it doesn’t add too   
   many or hide dependencies.
   1. Comprehensive tests existed.
   2. Unit test the code which is performing the intended functionality.
   3. Use existing API to replace test code