

# 2017 Java Coding Competition - Finals

## The Problem

Congrats on mastering your first assignment with SF University. We hope you enjoyed building blocks and conquering the concept of poly blocks. Your new assignment is to create a block chain and explain how SF could benefit from its technology. We have provided some basic requirements that include payments for claims and documenting these transactions through block chain.

## Description of the Basic Requirements (Successfully pass JUnit tests)

Block chain – A list of permanent records (blocks) that are linked together using a timestamp and other transactional data. The block chain eliminates paper processes and increases efficiencies building trust among all participants involved.

### BlockchainTest – step 1

- Run JUnits 1<sup>st</sup> time – expected results (Runs: 3/3, Errors: 0, Failures: 3)
- Verify chain after adding 2 claims and 2 payments for those claims.
- Etc.

### Extra features - Step 2:

Blockchain is not just for crypto currency. It has a number of other benefits. Please find features that could be useful from an insurance/financial perspective.

- Example of insurance implementation:  
<http://www.insurancejournal.com/news/international/2017/10/30/469647.htm>

### First Actions:

- Import the problem statement into your IDE - GitHub
- Prepare for your presentation (No powerpoints – UML is a good way to present design)

### When you are done:

- Update the feedback.txt file and include the following information:
  - Your team – name of each individual participating.
  - How many JUnits you were able to execute successfully.
  - Document and describe the additional “nice to have” features included, to help the judges properly grade your submission and explain how to properly execute new enhancements.
- Push your changes to one single branch for you and your teammate. Open a single pull request after development is completed.

### Questions:

- Analysts will be outside of your room to help with any questions you may have.

### Rules

- Contestants cannot seek help from individuals outside their team.
- Teams are expected to have the necessary tools and JARs preloaded on their machines **prior** to the competition.

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### How you will be Graded

Grading is broken up into 3 grading components:

Online Competition –	10
Finals Competition (coding) –	10
Presentation -	10

Finals Competition (coding):

- 100% core requirements (Step 1) met, including:
  - Number of JUnits that pass using correct functionality in the program
  - Code must compile and execute
- Code Cleanliness, Maintainability, Code documentation:
- Object-oriented principles:
- Creativity (Step 2):

Points

2

2

2

4