

## Front End Engineering Question

- Internet references permitted, please add reference links.
- Originality and Innovativeness key criteria
- Accompanied UNIT tests a plus
- Good Design and Javascript concepts is a key

Duration: Approximate test time 3-5 hours

### *Objective*

Create a simple game with the functions listed below.

**Attack** – The Player attacks the dragon for a random value and simultaneously is attacked by the dragon. The health reduces by the random value of both opponents.

**Blast** – The Player launches a power attack on the dragon and simultaneously is prone to a power attack on his health.

**Heal** – The Players health is increased by a random value. However during heal will be attacked by the dragon too.

**GiveUP** – You chickened out and takes you to the original Start Game interface.

### **Commentary:**

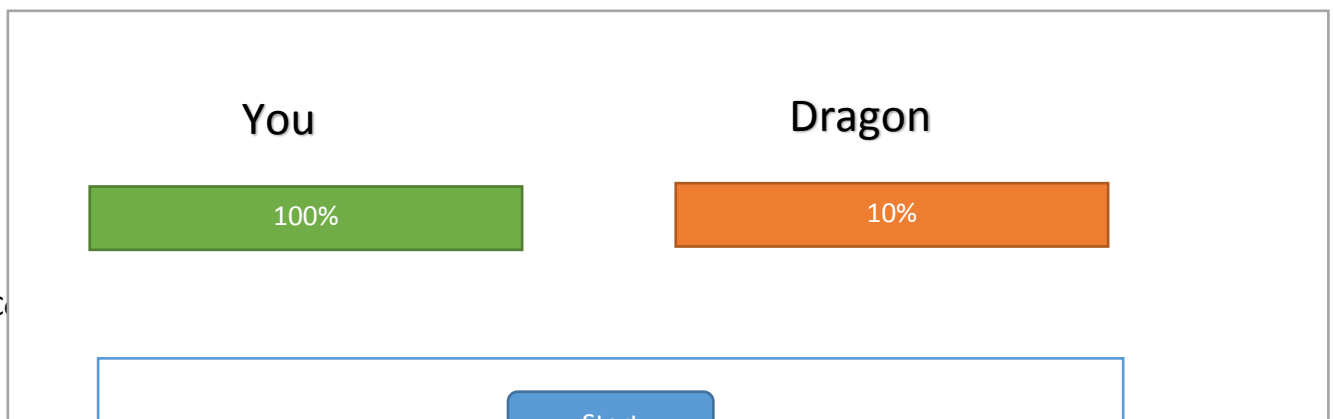
During the game there is a running commentary. This commentary has a configurable Number of items to list. Subsequently scrolls.

### **The Goal**

Whoever reduces the opponent's health to 0 or less wins the game.

### **Sample Interfaces**

Mere mocks, feel free to redesign to your innovative mind.



You

90%

Dragon

10%

Attack

Blast

Heal

Give Up

Game Commentary	
Monster Attacks Player for 7	
Player Attacks Monster for 10	
Monster Attacks Player for 7	
Player Attacks Monster for 10	

90%

-2%

Attack

Blast

Heal

Give Up

Game Commentary	
Monster Attacks Player for 7	
Player Attacks Monster for 10	
Monster Attacks Player for 7	
Player Attacks Monster for 10	

You Win. Do you want a re-match?

Yes

No

### Constraints

- Please leverage either Angular or VueJS
- The design must be 'secure'. The usage of 'eval' function in perl/javascript is not recommended being insecure. If you choose to use 'eval' instead of building your own parser/lexer, your code must be perfectly resilient against such security vectors. A single security vector problem infers task failure.

### Success Criteria

- Demonstrate ability to problem solve and deliver software in a timely fashion
- Demonstrate ability to generate clean and concise code and robust software design
- The purpose of this project is for you to demonstrate your professional skill. If your approach were to be different if it were a real-world project goal, then include, in comments in your code, high level alternative approach to the task.
- Note that completion of task within time frame is not essential for success. Document what you have been able to achieve within assigned time frame and steps to build / execute the shared solution.