**FRONT-END PROGRAMMING TEST**

**72andSunny Los Angeles**

Welcome to our front-end programming test. The exercises below are based on common situations developers face when building websites. Your responses should demonstrate your problem-solving skills, the quality of your implementation and how well you organize and document your code.

This is a timed test. Most candidates take 3-5 hours to complete it, but faster completion does not necessarily mean a better result.

Because there are multiple solutions to many of the challenges, **please add code comments** to explain the reasoning behind your approach to each scenario.

Your work should be delivered in a .zip file containing all code and documentation. All code delivered must be unburdened by restrictive licenses such as GPL. LGPL, MIT, BSD, and similar, compatible licenses are acceptable. Cite all sources used.

**#1 Rounded Corners and Drop Shadows**

**Code Location**

/rounded\_corners folder

**Challenge**  
Starting with the existing text box, add rounded corners and a drop shadow, while preserving the fluid liquid layout. There are multiple ways to solve this problem so please explain why you choose the solution you used in the comments of your code.

**#2 Opacity**

**Code Location**

/opacity folder

**Challenge**

Make it so that the div with the “textbox” class is slightly transparent. There are multiple ways to solve this problem so please explain why you choose the solution you used in the comments of your code.  
  
**Bonus Points**

Apply transparency to just the background of the “textbox” class div and not the child paragraph tags.

**#3 Preload an Image**

**Code Location**

/preloadimage folder

**Challenge**

Using either jQuery or plain JavaScript, preload the image of Saturn (preferably from NASA’s image host, but if NASA’s hosting service is down, use the local file.) Display the included spinner gif while the image is loading. There are multiple ways to solve this problem so please explain why you choose the solution you used in the comments of your code.  
  
**Bonus Points**   
Do not rely on static CSS widths and heights when displaying the loaded image.

**#4 Mouse Events**

**Code Location**  
/mouseevents folder

**Challenge**

Take a look at the code and determine why the content doesn’t display when the headers are clicked. Index.html is loading content from an external page (external.html). When any of the headers that say ‘Title’ are click, the hidden text in their sibling should be displayed. There are multiple ways to solve this problem, so please list why you choose the solution you did in the comments of your code. Finally, in your code comments, explain to a nontechnical person why the original script did not work.  
  
**Bonus Points**  
Explain why this demo will never work locally in the Chrome Browser (but will online).

**#5 HTML Email**

**Challenge**

Create an HTML email based on the design in the /email folder. Make sure it works in the major web browsers.

**Bonus Points**  
Make sure it also works in all Outlook clients.