

"JavaScript for Kids" Coding Class

**May/June 2015 - 4th and 5th Grade
Lesson 1**

Welcome to the Class!

Lesson 1

- Introductions and Books
- What is JavaScript?
- Setting up Machines!
- Data Types and Variables
 - Overview of types, and variables (15 min)
 - Incrementing and decrementing (15 min)
 - Working with strings (15 min)
 - Booleans (15 min)

Introductions

JAVASCRIPT FOR KIDS

A PLAYFUL INTRODUCTION TO PROGRAMMING

NICK MORGAN



What is JavaScript?

**Computer language that powers
the majority of Internet**

facebook

Search

Home Profile Account



Mark Robinson
View my profile

News Feed

Messages (90)

Events (3)

Photos

Friends

Applications

Games

Groups (1)

Marketplace

Friend Hug

More

Chat with friends

Go online

News Feed

Top news · Most recent 16

What's on your mind?



Fiona Baikie, Jackie James and Nick Procter commented on Nick Procter's status.

Yesterday at 22:08



Amy Simmonds ...swim swim swim swim...

4 hours ago · Comment · Like

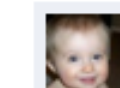
Joe Mordey likes this.

View all 7 comments



Danielle Eaton Glad u all had a lovely tine. Can't wait to c u on the 20th :0)

3 hours ago



Clare Shewring Just keep swimming!!! All that jacuzzi business took it out of me!!! These babies have got it too good!! I wouldn't mind but the pair of them looked right at home!!! :-)

50 minutes ago

Write a comment...



Sarah McDermott commented on Maddy McDermott's photo.



Christmas with the Nz fam

Requests

View all

3 event invitations

1 group invitation

1 Page suggestion

Suggestions

View all



Myriam Stobart

35 mutual friends

Add as a friend



Carol Power Gilhawley

15 mutual friends

Add as a friend

Sponsored

Best value offers online



Plus free standard set-up, and £25 M&S voucher when you join Sky TV with Sky+HD online. Supercharge your HD ready TV with Sky+HD.

Like

Events

View all

PRAYER VIGIL FOR JEREMY Now

Simone Mellor's birthday Today

Steve Blacker's birthday Today

Peter Francis's birthday Saturday

Prabal Ray's birthday Saturday

Connect with friends

Chat (Offline)

Done

<http://www.ixl.com/reports/performance/skill?cate>[Profile & settings](#) [Tell a friend](#) [User guides](#) [Help](#)Welcome, Angell! [Sign out](#)[Practice](#)[Reports](#)[Roster](#)[Awards](#)[State Standards](#)[Membership](#)[Reports home](#)[Status update](#)[Usage](#)[Performance](#)[Performance by student](#)[Performance by skill](#)[Student performance by category](#)[Student performance by skill](#)[Recent skills](#)[Speed and accuracy](#)[Performance rankings](#)[Grade-level proficiency](#)[Category proficiency](#)[Skill proficiency](#)[Trouble spots](#)[Progress](#)[Reports](#) >> [Skill proficiency](#)[Related reports](#)[Last 5](#)

Date range

School year

08/21/2012



01/03/2013



Grade

6



Category/skill

AA.14 Percents of numbers and money amounts

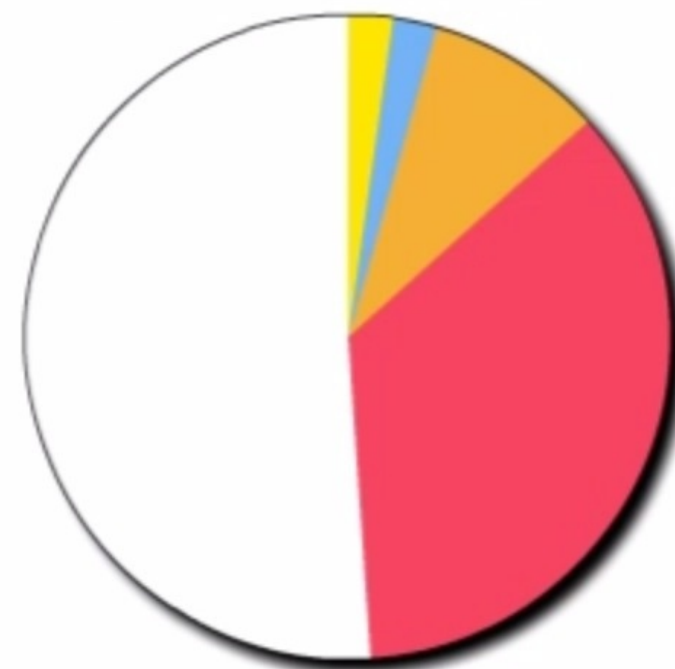
[Update report](#)

Skill summary

Total problems practiced 562

Class average SmartScore 26

Overall performance



Mastered

Excellent

Good

Satisfactory

Needs improvement

Provisional

Not practiced



CUBE SLAM
LEVEL 1

YOU



BOB



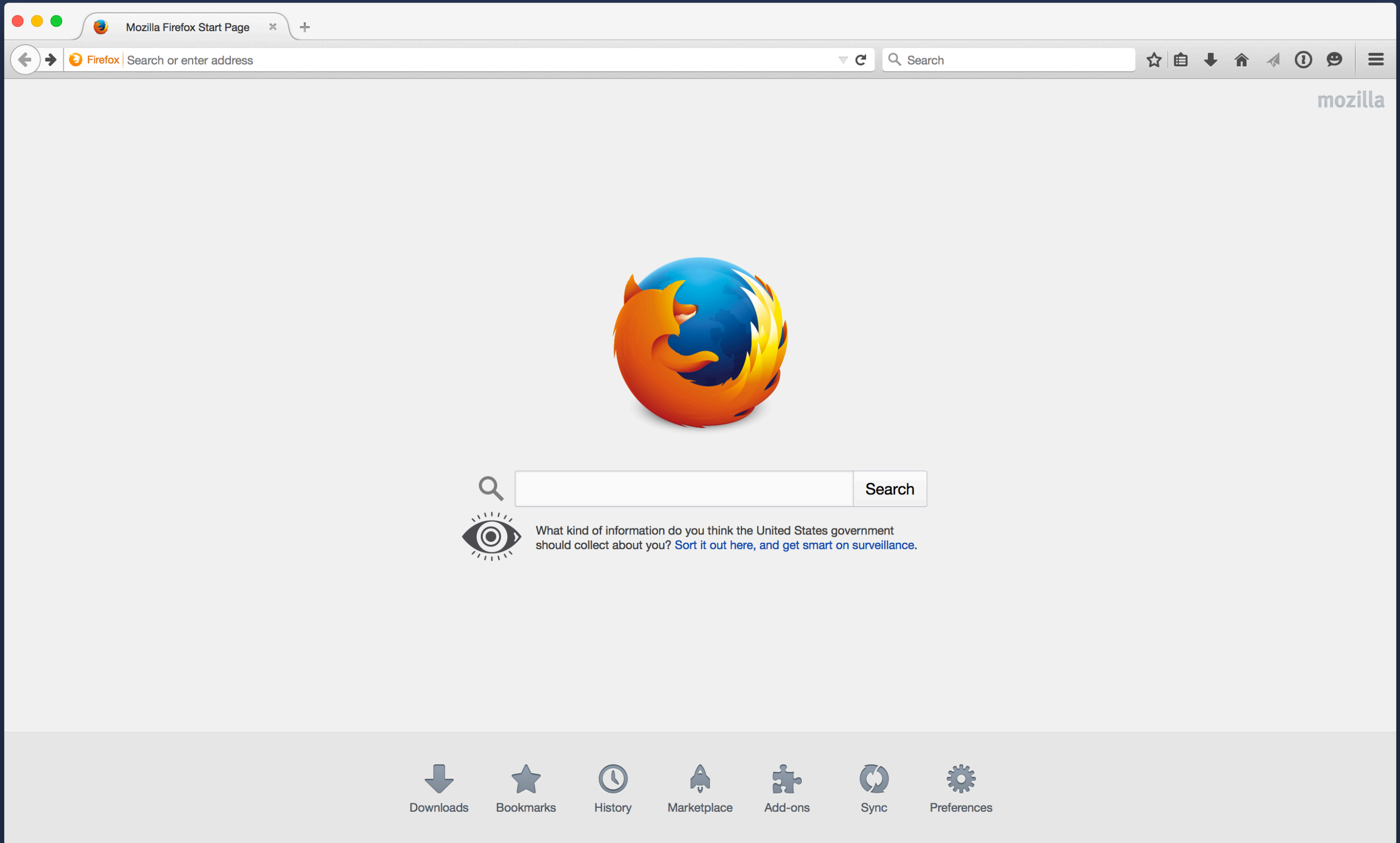
**Learn basics of JavaScript over
the next six weeks!**

**By Week 6, putting together a
simple game**

Setting up your machines

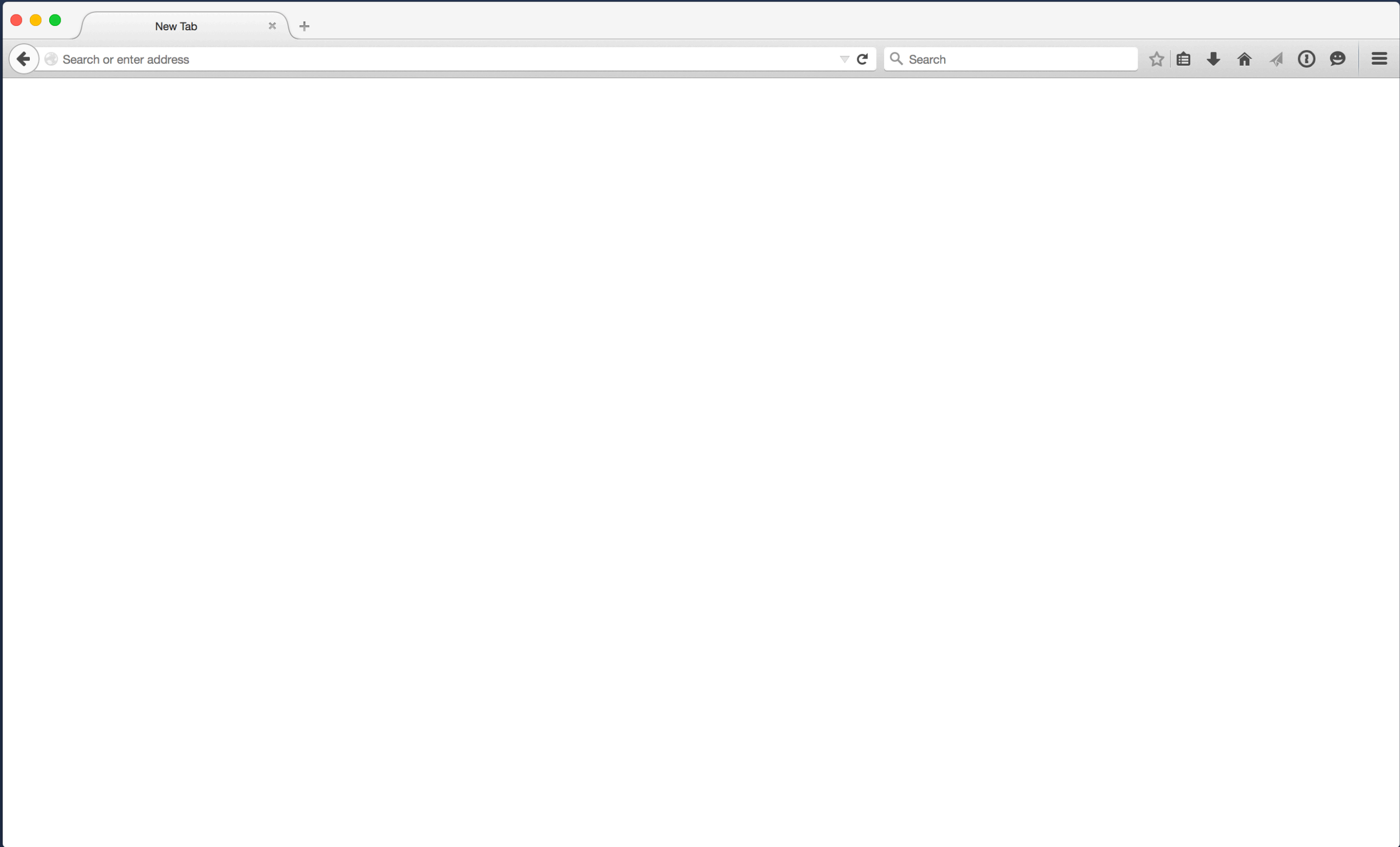


Firefox®

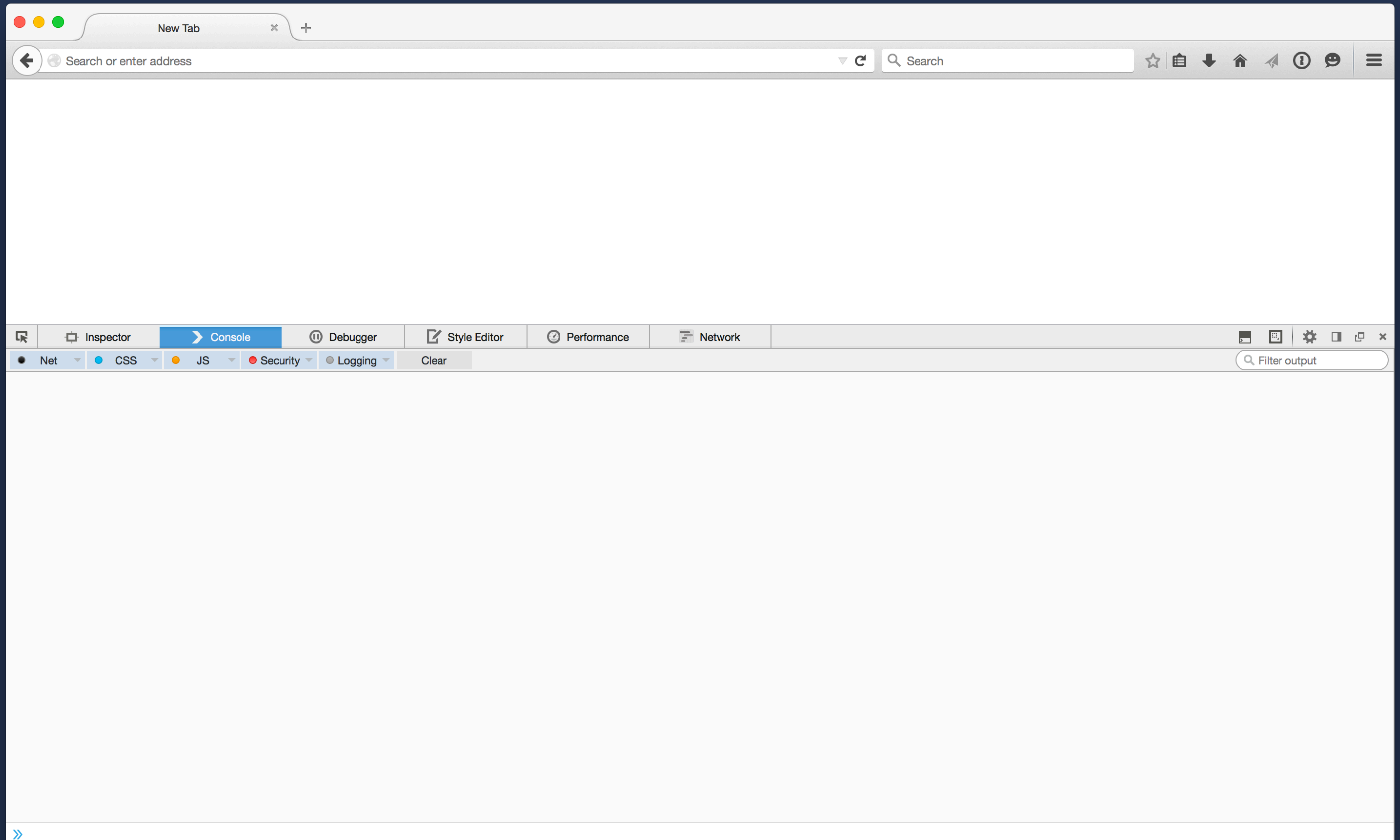


Update FireFox to 37.0.2

about:blank



- 1. Tools Menu**
- 2. Select Web Developer**
- 3. Select Web Console**



Let's Write Some JavaScript!

Data Types

Numbers, Strings, Booleans

Data Types (Numbers)

- $10 + 10$
- $17 - 7$
- $9 * 5$
- $50 / 2$
- $8 / 1 + 3$

Try it out! (Page 15)

Variables

Variables

- `var age = 13;`
- `var numberOfStudents = 4 + 4;`
- `numberOfStudents * 2`

Naming Variables

- Rules
 - Cannot have spaces
 - Cannot start with a number
 - Usually lowercase
- Join words with Camel Case
 - numberOfStudents, lengthOfFootballField, timeInSchool

Try it out! (Page 19)

Incrementing and Decrementing

- ++ and -- operator
- += and -= operator

Try it out!

**My birthday is in 5 days from
now. How long in seconds until
my birthday?**

(Page 20 if you need help)

Data Types (Strings)

Data Types (Strings)

- "Hello World"
- 'Hello World'
- `var greeting = 'Hello World';`
- `var greeting = 'Hello ' + 'World';`

Try it out! (Page 23)

Working with Strings

- `name.length`
- `name[0]`
- `name.slice(0,5)`
- `.toUpperCase()` and `toLowerCase()`

Try it out! (Page 25)

Try it out!

**Extract the word "RoseHill" from
the sentence "Rose Garden Hill
Top"**

Data Types (Booleans)

Data Types (Booleans)

- `var raining = false;`
- `var thursday = true;`
- Operators
 - `!` (not)
 - `&&` (and)
 - `||` (or)

Try it out! (Page 30)

Comparisons with Booleans

- `<`, `>`, `<=`, `>=`
- `height < minimumHeight`
- `mySecretNumber === yourGuess`
- `!=`
- `==` VS. `===`

Try it out! (Page 33)

PG-13 Movie Theater Example!

```
var age = 12;  
var accompanied = false;  
var allowed = ...
```

End of Lesson 1!