





I'm Lindsay.

I like bacon.

# Refactoring Laksa Time

Focusing on:

- readability/maintainability
- stability
- performance

# Step #1

Update to jQuery 1.6

```
<script type="text/javascript" src="http://ajax.googleapis.com/ajax/libs/jquery/1.4/jquery.min.js"></script>
```

# Step #1

Update to jQuery 1.6

```
<script type="text/javascript" src="http://ajax.googleapis.com/ajax/libs/jquery/1.6/jquery.min.js"></script>
```

# Step #2

## Local jQuery fallback

```
<script type="text/javascript" src="http://ajax.googleapis.com/ajax/libs/  
jquery/1.6/jquery.min.js"></script>  
<script type="text/javascript">!window.jQuery && document.write('<script  
src="js/jquery-1.6.1.min.js"><\script>')</script>
```

# Step #3

Remove `type` attributes from `<script>`

```
<script src="http://ajax.googleapis.com/ajax/libs/jquery/1.6/  
jquery.min.js"></script>  
<script>!window.jQuery && document.write('<script src="js/  
jquery-1.6.1.min.js"></script>')</script>  
<script>  
...  
</script>
```



# Step #4

Change `$(document).ready()` to `$()`

```
$(document).ready( function() {  
    countdown();  
    var timer = setInterval(countDown, 10000);  
});
```



# Step #4

Change `$(document).ready()` to `$()`

```
$( function() {  
    countdown();  
    var timer = setInterval(countdown, 10000);  
});
```

# Step #5

Change options hash to regular old variables

```
var options = {
  "yesMessage": "YES!",
  "noMessage": "No",
  "target": "#isitlaksatime",
  "day": 5,           // 5 for friday
  "hour": 12          // 12 for noon!
};

function countdown() {

  var target = options.target,
      targetDay = options.day,
      targetHour = options.hour,
      yesMessage = options.yesMessage || "Yes",
      noMessage = options.noMessage || "No",
      now = new Date(),
      theDay = now.getDay(),
      theHour = now.getHours(),
      theMinute = now.getMinutes();

  ...

}
```

# Step #5

Change options hash to regular old variables

```
var target = "#isitlaksatime",
    targetDay = 5,
    targetHour = 12,
    yesMessage = "YES!",
    noMessage = "No";

function countdown() {

    var now = new Date(),
        theDay = now.getDay(),
        theHour = now.getHours(),
        theMinute = now.getMinutes();

    ...

}
```

# Step #6

Inline / remove some variables

```
var target = "#isitlaksatime",
    targetDay = 5,
    targetHour = 12,
    yesMessage = "YES!",
    noMessage = "No";

...

message = noMessage;

...

$(target).text(message);

...

var timer = setInterval(countDown, 10000);
```

# Step #6

Inline / remove some variables

```
var targetDay = 5,  
    targetHour = 12;  
...  
  
message = "No";  
  
...  
  
$("#isitlaksatime").text(message);  
  
...  
  
setInterval(countDown, 10000);
```

# Step #7

Change long class name toggling to single line

```
if (message.length > 10) {  
    $( "body" ).addClass( "long" );  
} else {  
    $( "body" ).removeClass( "long" );  
}
```

# Step #7

Change `long` class name toggling to single line

```
$("body").toggleClass("long", message.length > 10);
```



# Step #8

## Cache elements

```
$("#isitlaksatime").text(...);
```

```
...
```

```
$("body").toggleClass(...)
```

# Step #8

## Cache elements

```
var $body = $("body"),  
    $message = $("#isitlaxsatime");
```

```
...
```

```
$message.text(...);
```

```
...
```

```
$body.toggleClass(...)
```

# Step #9

## Declare message variable

```
var ...

if ( theDay === targetDay ) {

    if ( theHour === targetHour ) {
        message = yesMessage;
    } else if ( (theHour + 2) === targetHour ) {
        // can't be arsed abstracting these
        message = "Not yet";
    } else if ( (theHour + 1) === targetHour ) {
        message = "Soon";
        if ( theMinute >= 45 ) {
            message = "Really soon";
        }
        if ( theMinute >= 55 ) {
            message = "Nearly";
        }
        if ( theMinute >= 58 ) {
            message = "Get ready";
        }
    } else {
        message = "No";
    }

} else if ( theDay === (targetDay - 1)) {
    message = "Come back tomorrow";
} else {
    message = "No";
}
```

# Step #9

## Declare message variable

```
var ...
    message = "No";

if ( theDay === targetDay ) {

    if ( theHour === targetHour ) {
        message = yesMessage;
    } else if ( (theHour + 2) === targetHour ) {
        // can't be arsed abstracting these
        message = "Not yet";
    } else if ( (theHour + 1) === targetHour ) {
        message = "Soon";
        if ( theMinute >= 45 ) {
            message = "Really soon";
        }
        if ( theMinute >= 55 ) {
            message = "Nearly";
        }
        if ( theMinute >= 58 ) {
            message = "Get ready";
        }
    }

}

} else if ( theDay === (targetDay - 1)) {
    message = "Come back tomorrow";
}
```

# Step #10

## Rewrite message logic

```
if ( theDay === targetDay ) {

    if ( theHour === targetHour ) {
        message = yesMessage;
    } else if ( (theHour + 2) === targetHour ) {
        // can't be arsed abstracting these
        message = "Not yet";
    } else if ( (theHour + 1) === targetHour ) {
        message = "Soon";
        if ( theMinute >= 45 ) {
            message = "Really soon";
        }
        if ( theMinute >= 55 ) {
            message = "Nearly";
        }
        if ( theMinute >= 58 ) {
            message = "Get ready";
        }
    }

}

} else if ( theDay === (targetDay - 1)) {
    message = "Come back tomorrow";
}
```

# Step #10

## Rewrite message logic

```
if ( theDay < (targetDay - 1)) {
    // Do nothing
}else if ( theDay === (targetDay - 1)) {
    message = "Come back tomorrow";
}else if ( theDay === targetDay ) {

    if ( (theHour + 1) === targetHour ) {
        message = "Soon";
        if ( theMinute >= 45) {
            message = "Really soon";
        }
        if ( theMinute >= 55) {
            message = "Nearly";
        }
        if ( theMinute >= 58) {
            message = "Get ready";
        }
    }else if ( (theHour + 2) === targetHour ) {
        // can't be arsed abstracting these
        message = "Not yet";
    }else if ( theHour === targetHour ) {
        message = "YES!";
    }
}
}
```

# Step #10a

Ternary operators FTMTFW!!1!!!\one

```
var ...  
    message = theDay === targetDay ? theHour ===  
targetHour ? "YES!" : theHour + 2 === targetHour ? "Not yet" : theHour  
+ 1 === targetHour ? theMinute >= 58 ? "Get ready" : theMinute  
>= 55 ? "Nearly" : theMinute >= 45 ? "Really soon" : "Soon" : "No" :  
theDay === targetDay - 1 ? "Come back tomorrow" : "No";
```



# Step #11 (should be 0)

Test. Everything.

```
var $body = $("body"),  
    $message = $("#isitlaxsatime");  
...  
  
    $message.text(...);  
    ...  
    $body.toggleClass(...)
```

# Step #11 (should be 0)

Test. Everything.

```
var $body, $message;
...

$message.text(...);
...
$body.toggleClass(...)
...

$( function() {
    $body = $("body");
    $message = $("#isitlaxsatime");
    countdown();
    setInterval(countdown, 10000);
});
```









Main bits:

- Testing is grouse



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- Pay attention to where variables are declared

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- Put branches that are most likely to be encountered first

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- Testing is grouse
- Pay attention to where variables are declared
- Put branches that are most likely to be encountered first
- Don't refactor while drinking

```
var ...  
    message = theDay === targetDay ? theHour ===  
targetHour ? "YES!" : theHour + 2 === targetHour ? "Not yet" : theHour  
+ 1 === targetHour ? theMinute >= 58 ? "Get ready" : theMinute  
>= 55 ? "Nearly" : theMinute >= 45 ? "Really soon" : "Soon" : "No" :  
theDay === targetDay - 1 ? "Come back tomorrow" : "No";
```