

# MINI APPS TO GET YOU STARTED

## 8 2 4 3 What will you see?



```
1 fill('black')
2 stamp('earth')
```

Maybe you'll see Earth from outer space!  
Can you change it to a different planet you'd like to visit?

## 3 7 8 3 Who will you be?

```
1 stamp('crystal ball')
2 text('You will be a ninja',200,500)
```

The text command writes whatever you want it to.

## 2 3 4 6 What will you create?

```
1 function drag() {
2   stamp('airbrush',x,y,100)
3 }
```

Draw with a touch! Remember—anything is possible.

## 7 3 9 5 Which pet will you adopt?



```
1 fill('pets')
2 line(530,900,10,'black')
```

Change line 2 to point at your favorite critter.

6 9 7 8

# Where will you park your Hoverhouse?

Flying cars are so 2075.  
How about a flying *house* instead?



Start by typing in this code:

```
1 fill('hoverland')
2 stamp('hoverhouse',200,300)
```

Now move your cursor across the tablet on your screen.

Do you see the little orange numbers? They help you figure out where to place stamps.

**Move your Hoverhouse.**

Change the numbers on line 2 like this:

```
1 fill('hoverland')
2 stamp('hoverhouse',600,200)
```



Where else can you park your Hoverhouse?

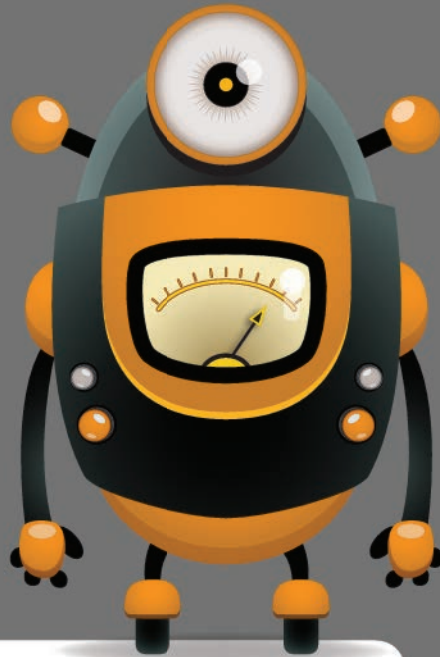
How would you add another Hoverhouse to the app?



7 6 8 8

# Bitsbox Boxbot

Draw a robot using basic shapes. World domination happens one box at a time.



```

1 color1 = 'bitsbox yellow'
2 color2 = 'outrageous orange'
3 color3 = 'cornflower blue'
4
5 fill('robots')
6 box(300,350,200,300,color1)
7 circle(370,420,10,color2)
8 circle(430,420,20,color2)
9 line(350,500,450,480,color3,20)

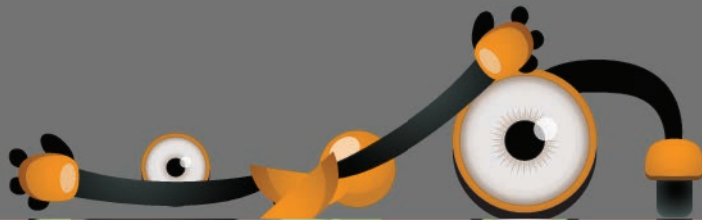
```



## Make changes super quick!

See the code on line 1? It means that typing `color1` is the same thing as typing `'bitsbox yellow'`. Whenever you want to use the color `'bitsbox yellow'` in your app, you can just type `color1`.

In this app, `color1` is a *variable*. Variables are super common in coding because they make it easy to make big changes very quickly.



8 7 7 9

# MAZE RUNNER

Wherever you drag your finger, Mazebot follows.  
Can you find the way out?

```

1 fill('maze')
2 bot = stamp('mazebot',100)
3
4 function drag() {
5   bot.move(x,y,300)
6 }

```



Lines 4, 5 and 6 tell  
the robot to move  
when you drag.



## This app is a total drag.

`drag()` is a basic Bitsbox command. It tells your app what to do when someone drags their cursor (or their finger) on the screen.



Pssst! Try substituting `'maze2'` on line 1.

# Escape Pod

Help these stranded astronauts get back to their flying saucer. Watch out, though—they don't fly straight!

```

1 fill('stars2')
2 pod = stamp('saucer',350,900)
3
4 function thrust() {
5   this.change('flyer')
6 }
7
8 function create() {
9   astro = stamp('drifter',100)
10  astro.move()
11  astro.rotate()
12  astro.rotate(5000,100000)
13  astro.tap = thrust
14 }
15 repeat(create,5)

```

```

16
17 function launch(target) {
18   target.move(375,-600,2000)
19 }
20
21 function fly(astro) {
22   astro.move(UP,30)
23   if (astro.hits(pod)) {
24     astro.rotate(0).change('astro')
25   }
26 }
27
28 function loop() {
29   find('flyer').forEach(fly)
30   saved = find('astro')
31   if (saved.length >= 4) {
32     pod.change('flying saucer')
33     launch(pod)
34     saved.forEach(launch)
35   }
36 }

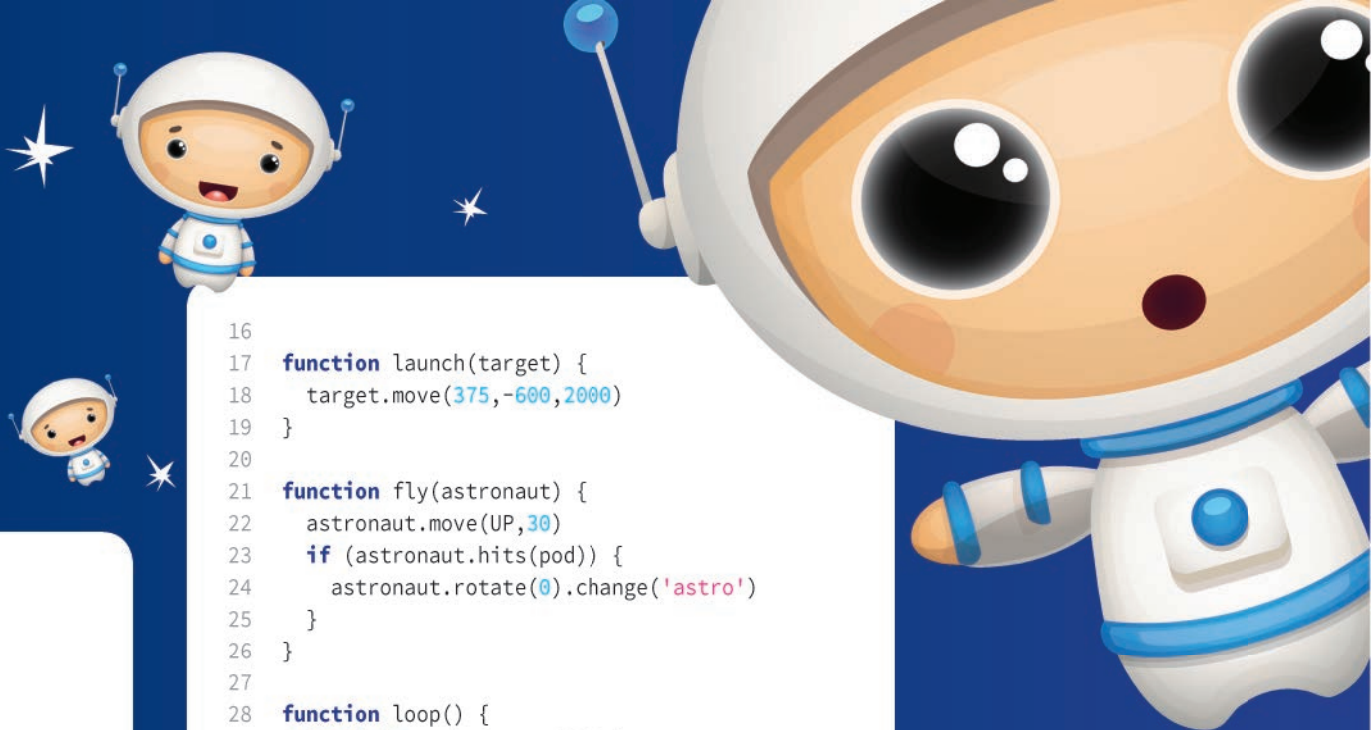
```

## Dizzy much?

This app is a showcase for Bitsbox's `.rotate` command.

On line 11, there's nothing between `rotate`'s parentheses `()`. This tells the app to rotate each new astronaut randomly—so they're not all facing the same way when the app starts.

On line 12, `rotate` has two huge numbers in its parentheses. The first tells the astronaut to spin 5000 degrees, which is almost 14 times. The second tells the astronaut *how long* to spin: 100,000 *milliseconds*, which is 100 seconds, which is 1 minute and 40 seconds.



# STAMPS

Use these stamps (& fills & songs & sounds) to make any app your own! ✨  
Just don't forget to put single quotes around them in your code, like this:

```
stamp('foxboy') fill('iguana') song('storm') sound('duck')
```



## SONGS

bigrock  
darkhop  
explosions  
hunter  
love  
merrygo  
parade  
run  
whistle

## FILLS



## SOUNDS

alligator  
balloon  
blip  
caw  
chicken  
cloud  
damage  
drip  
droid  
evillaugh  
explosion  
fish  
ghost  
hedgehog  
horn  
junglebird  
laser  
lightning  
lion  
mermaid  
playball  
quack  
rain  
rewind  
rocket2  
sax  
teleport  
toad  
ufo2  
yowl  
zwoop



More stuff  
online!

Look for more when  
you're coding at  
[bitsbox.com](http://bitsbox.com)!