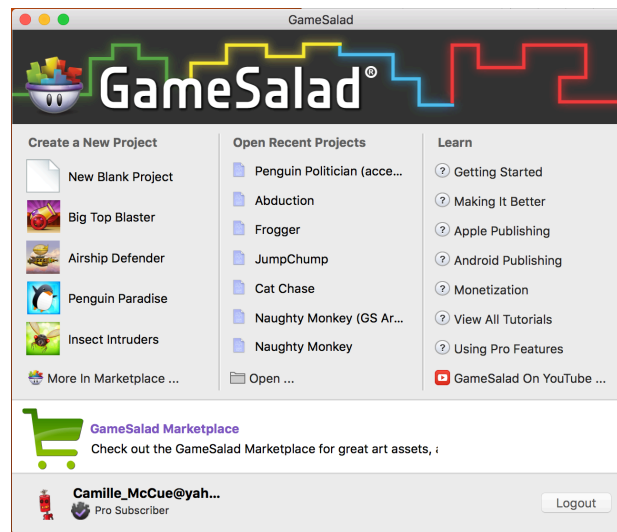


# MOBILE APP DEVELOPMENT: PENGUIN POLITICIAN

From  
<http://gamesalad.com/download>  
download GameSalad Creator and  
install it on your computer.

Using the login and password  
provided in class, login to  
GameSalad.

Create a new Blank Project.



# PENGUIN POLITICIAN

GameSalad File Edit Format Layout View Window Help

Penguin Politician iPhone 6+

Back/Forward Home Scenes Tables Preview HTML5 Preview Publish Feedback Help

Project Info Scenes Actors Tables

**Adjust this platform to match your device**

Title Penguin Politician

Platform iPhone 6 Plus Portrait

Resolution Independence

Crop Mode for Other Device Resolutions

Description (Draft) Keyboard: Use the arrow keys to move the penguin around, collecting all the votes before boarding Air Force One!  
Device: Tip the phone to collect the votes!

Multiplayer (beta) None

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Download the Penguin Politician asset pack from  
the URL provided:





<http://bit.ly/2mgpMzH>



Main





Inspector

Game Scene

Actors	Attributes	Devices
 background	 penguin	
 vote	 plane	

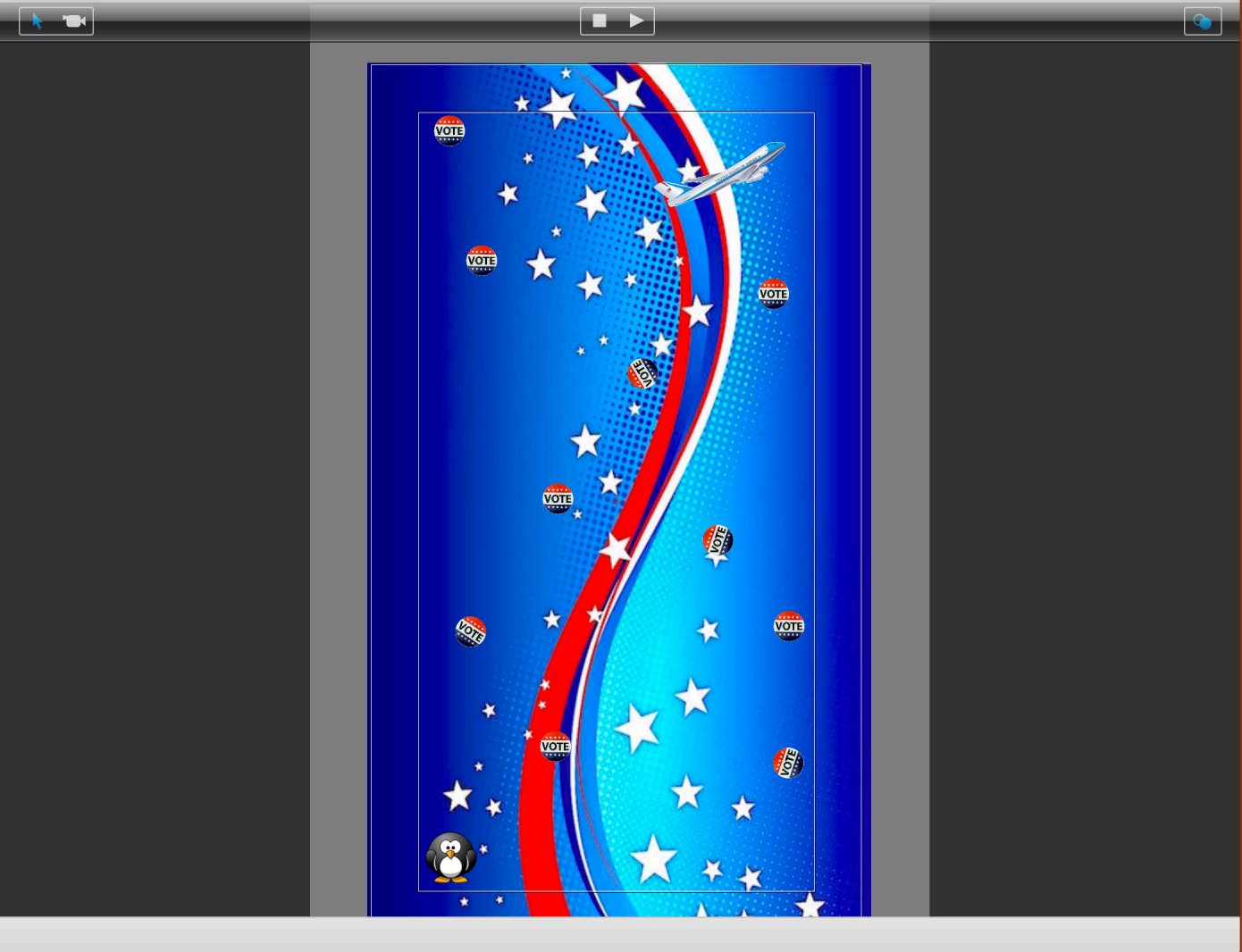
Library Behaviors Images Sounds Fonts

Project Purchased





 redwhite...	 penguin...	 vote butt...	 usa air f...
--	---	---	---

Purchase Images...

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Inspector

Actors	Attributes	Devices
 background	 penguin	
 vote	 plane	

Library

Behaviors Images Sounds Fonts

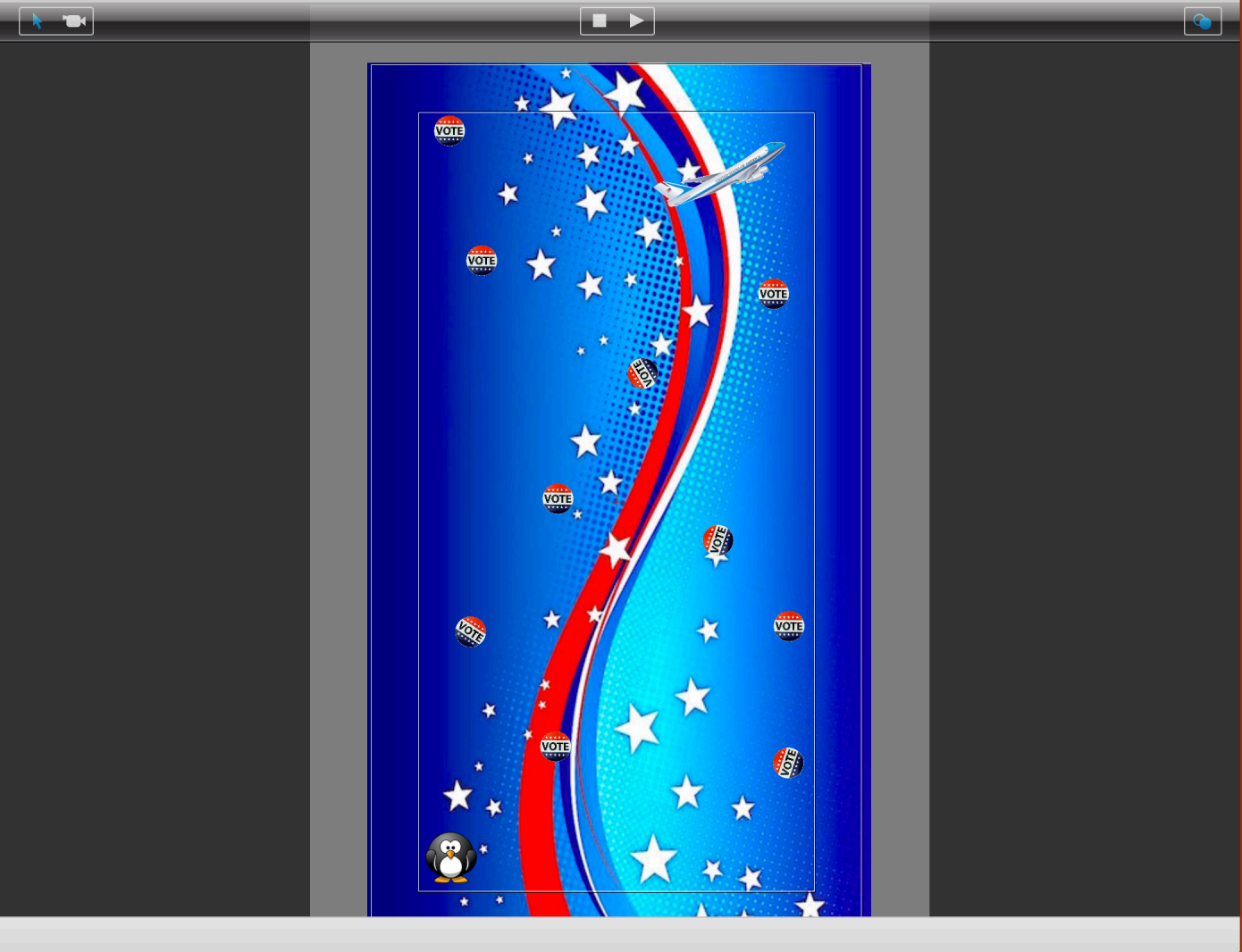
Project Purchased

 blip sound	 crowdcheer	 hail_to_chief
---	---	--

Sounds Music

Purchase Sounds...

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Inspector Game Scene

Actors	Attributes	Devices
randomSeed	-1	integer
Display Size		size
Actor Tags		text
Platform Connected	<input type="checkbox"/>	boolean
Ad Reward		adreward
Player Type	Single Player	enumerat...
Player 1 Keymap		playermap
Player 2 Keymap		playermap
Player 3 Keymap		playermap
Player 4 Keymap		playermap
Player 5 Keymap		playermap
Player 6 Keymap		playermap
Player 7 Keymap		playermap
Player 8 Keymap		playermap
PurchaseTable		table
totalVotes	0	integer
flyAway	<input type="checkbox"/>	boolean

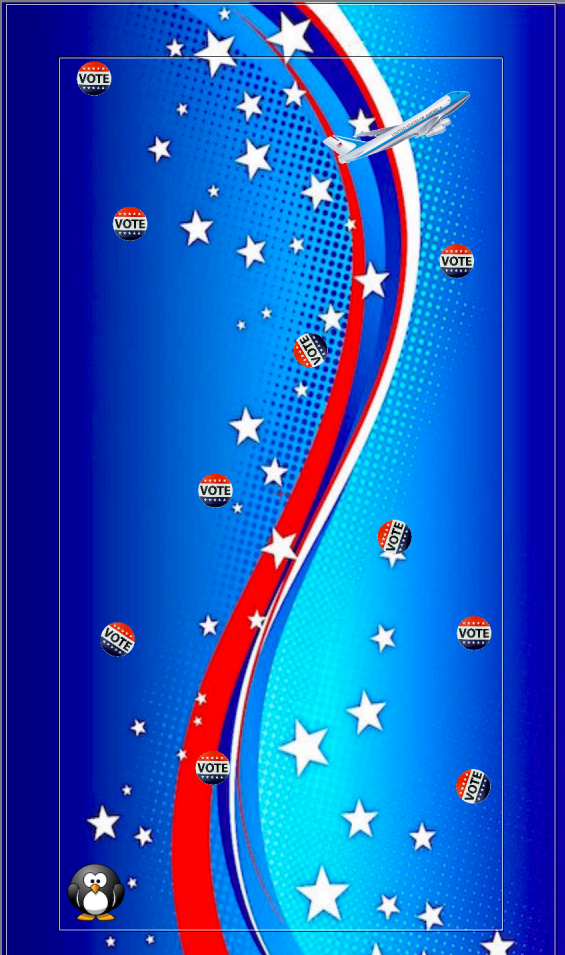
Add two variables:  
 totalVotes of type integer  
 flyAway of type Boolean

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Standard Custom

B Accelerate	<b>Accelerate</b> (Persistent Behavior)
B Accelerate Toward	
A Add/Remove Row	
B Animate	
A Buzz	
A Change Attribute	
A Change Image	
A Change Scene	
B Change Size	
A Change Table Value	
A Change Velocity	
B Collide	
B Constrain Attribute	
B Control Camera	
A Copy Table	

Specify the speed and direction (angle) of acceleration of an actor. Best used in a rule that checks for a keyboard event. Note: If the drag behavior is not also applied to an actor, acceleration will be continuously applied, adding greater and greater speed to the actor until it has reached its maximum defined speed. Note that as this behavior never stops executing, if it is a sequential group, subsequent behaviors will not execute. See also **Accelerate Toward** Behavior.



Inspector

Game Scene

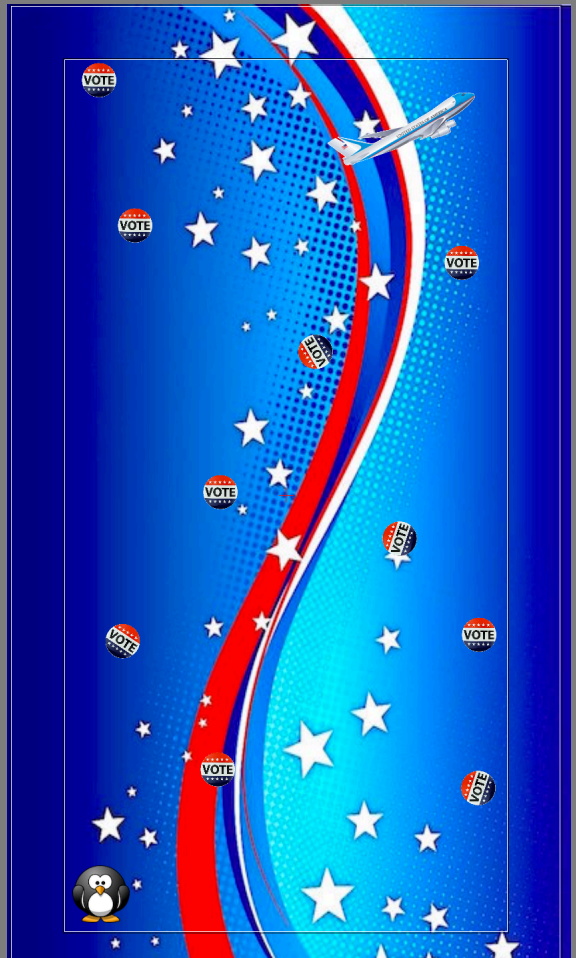
Actors	Attributes	Devices
▶ Mouse		attributes
▶ Players		attributes
▶ Touches		attributes
▶ Accelerometer		attributes
▼ Screen		attributes
▶ Size		size
Device Orientation	Portrait	enumerat...
Interface Orientation	Portrait	enumerat...
Device Rotation	0	angle
▶ Audio		attributes
▶ Clock		attributes
▶ Platform		attributes

Library

Behaviors Images Sounds Fonts

Standard Custom

B Accelerate	<b>Accelerate</b> <i>(Persistent Behavior)</i> Specify the speed and direction (angle) of acceleration of an actor. Best used in a rule that checks for a keyboard event. Note: If the drag behavior is not also applied to an actor, acceleration will be continuously applied, adding greater and greater speed to the actor until it has reached its maximum defined speed. Note that as this behavior never stops executing, if it is a sequential group, subsequent behaviors will not execute. See also <b>Accelerate Toward</b> Behavior.
B Accelerate Toward	
A Add/Remove Row	
B Animate	
A Buzz	
A Change Attribute	
A Change Image	
A Change Scene	
B Change Size	
A Change Table Value	
A Change Velocity	
B Collide	
B Constrain Attribute	
B Control Camera	
A Copy Table	







**Play Sound**

Sound: crowdcheer  Loop  Run to completion

Volume: 1

Pitch: 1

Positional Sound  Velocity Shift

**Change Attribute**

Change Attribute: game.totalVotes To: 0

**Attribute Browser**

- Game
- Devices
- background
  - Player 4 Keymap
  - Player 5 Keymap
  - Player 6 Keymap
  - Player 7 Keymap
  - Player 8 Keymap
  - PurchaseTable
  - totalVotes**
  - flyAway

Initialize totalVotes to 0

Attributes

Name	background	text
Time	0	real
Position		point
Size		size
Width	300	real
Height	450	real
Rotation	0	angle
Color		color
Image	redwhiteblue	image
Tags		text
Preload Art	<input type="checkbox"/>	boolean
Graphics		attributes

Library Behaviors Images Sounds Fonts

Standard Custom

<b>B</b> Accelerate	<b>Accelerate</b> (Persistent Behavior)
<b>B</b> Accelerate Toward	
<b>A</b> Add/Remove Row	
<b>B</b> Animate	Specify the speed and direction (angle) of acceleration of an actor. Best used in a rule that checks for a keyboard event.
<b>A</b> Buzz	Note: If the drag behavior is not also applied to an actor, acceleration will be continuously applied, adding greater and greater speed to the actor until it has reached its maximum.
<b>A</b> Change Attribute	
<b>A</b> Change Image	
<b>A</b> Change Scene	
<b>B</b> Change Size	
<b>A</b> Change Table Value	

## PHASE I

Code the game for keyboard operation.

The penguin will move using the keyboard arrow keys.



Attributes

Name	penguin	text
Time	0	real
Position		point
Size		size
Width	100	real
Height	100	real
Rotation	0	angle
Color		color
Image	penguin.tiny	image
Tags		text
Preload Art	<input type="checkbox"/>	boolean
Graphics		attributes

Standard Custom

<b>B</b> Accelerate	<b>Accelerate</b> (Persistent Behavior)
<b>B</b> Accelerate Toward	
<b>A</b> Add/Remove Row	
<b>B</b> Animate	Specify the speed and direction (angle) of acceleration of an actor. Best used in a rule that checks for a keyboard event.
<b>A</b> Buzz	Note: If the drag behavior is not also applied to an actor, acceleration will be continuously applied, adding greater and greater speed to the actor until it has reached its maximum.
<b>A</b> Change Attribute	
<b>A</b> Change Image	
<b>A</b> Change Scene	
<b>B</b> Change Size	
<b>A</b> Change Table Value	

**Rule: Waddle Right**

When All conditions are valid:

- Actor receives event key right Keyboard is down

**Move**

- Direction: 0
- Relative to: scene
- Move Type: additive
- Speed: 300

Otherwise:

---

**Rule: Waddle Left**

**Rule: Waddle Up**

**Rule: Waddle Down**

---

**Rule: When all votes are counted, board Air Force One**

When All conditions are valid:

- Actor receives event overlaps or collides with actor of type plane
- Attribute game.totalV... = 10

**Destroy**

- Destroy this actor

Otherwise:

Follow the pattern of the Rule: Waddle Right to complete the Waddle Rules for these other three directions (Left, Up, Down)



Attributes

Name	vote	text
Time	0	real
Position		point
Size		size
Width	30	real
Height	30	real
Rotation	0	angle
Color		color
Image	vote button	image
Tags		text
Preload Art	<input type="checkbox"/>	boolean
Graphics		attributes

Library Behaviors Images Sounds Fonts

- Standard Custom
- Accelerate **Accelerate (Persistent Behavior)**  
Specify the speed and direction (angle) of acceleration of an actor. Best used in a rule that checks for a keyboard event. Note: If the drag behavior is not also applied to an actor, acceleration will be continuously applied, adding greater and greater speed to the actor until it has reached its maximum.
  - Accelerate Toward
  - Add/Remove Row
  - Animate
  - Buzz
  - Change Attribute
  - Change Image
  - Change Scene
  - Change Size
  - Change Table Value

**Rule: Get collected by penguin**

When **All** conditions are valid:

- Actor receives event overlaps or collides with actor of type penguin

**Change Attribute: Increment totalVotes by 1**

Change Attribute: game.totalVotes To: game.totalVotes + 1

**Play Sound**

Sound: blip sound  Loop  Run to completion

Volume: 1  Positional Sound

Pitch: 1  Velocity Shift

**Buzz**

Buzz phone if vibration is turned on

**Destroy: Make vote disappear when collected**

Destroy this actor

Otherwise:

Expression Editor

= game.totalVotes +1

insert function: remove expression

Press the **e** to open the Expression Editor. Then press the down arrow tab to select **game.totalVotes** and then type **in +1**

GameSalad File Edit Format Layout View Window Help 100% Mon 9:28 PM

Penguin Politician (arrow keys) iPhone 6+ - plane (Prototype)

Back/Forward Home Scenes Tables Preview HTML5 Preview Publish Feedback Help

Create Group Create Rule

**Rule: When penguin boards plane and has collected all votes, play music and set flyAway to true**

When All conditions are valid:

- Actor receives event overlaps or collides with actor of type penguin
- Attribute game.totalV... = 10

**Play Music**

Sound: hail\_to\_chief Loop

**Change Attribute**

Change Attribute: game.flyAway To: true

**Rule: When flyAway is true, the plane flies away**

When All conditions are valid:

- Attribute game.flyAway is true

**Move**

Direction: 45 Relative to: scene Move Type: additive

Speed: 100

**Attribute Browser**

- Game
- Devices
- plane
  - Player 4 Keymap
  - Player 5 Keymap
  - Player 6 Keymap
  - Player 7 Keymap
  - Player 8 Keymap
  - PurchaseTable
  - totalVotes
  - flyAway

**Attributes**

Name	plane	text
Time	0	real
Position		point
Size		size
Width	150	real
Height	40	real
Rotation	0	angle
Color		color
Image	usa air force one	image
Tags		text
Preload Art		boolean
Graphics		attributes

**Library**

Standard Custom

- Accelerate **Accelerate (Persistent Behavior)**
- Accelerate Toward
- Add/Remove Row
- Animate
- Buzz
- Change Attribute
- Change Image
- Change Scene
- Change Size
- Change Table Value

Specify the speed and direction (angle) of acceleration of an actor. Best used in a rule that checks for a keyboard event. Note: If the drag behavior is not also applied to an actor, acceleration will be continuously applied, adding greater and greater speed to the actor until it has reached its maximum.

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Press the Preview button (green arrow) at the top of the window to test your game in keyboard mode.

For the next phase, you will need to set up your phone to execute your app. Follow these steps:

1. Go to the App Store
2. Download and install the free GameSalad Viewer on your phone
3. Your phone and computer must be on the same wireless network: at school, this is the **AEC network** with password **Hearusroar!**



## PHASE II

Revise the code (as shown on the follow page) to execute on your mobile device.

The penguin will move according to the direction you tip the phone. The device accelerometer will be used (although this reads as **game.accelerometer** in the code).

GameSalad File Edit Format Layout View Window Help

Penguin Politician (accel) iPhone 6+ - penguin (Prototype)

Back/Forward Home Scenes Tables Preview Preview on iPhone HTML5 Preview Publish Feedback Help

Create Group Create Rule

**Rule: Waddle Right**

When Any conditions are valid:

Actor receives event key right Keyboard is down

Attribute game.Accel... > 0.1

**Move**

Direction: 0 Relative to: scene Move Type: additive

Speed: 300

**Attribute Browser**

Game	Mouse	X
Devices	Players	Y
penguin	Touches	Z
	Accelerometer	
	Screen	
	Audio	
	Clock	
	Platform	

**Rule: Waddle Left**

**Rule: Waddle Up**

**Rule: Waddle Down**

When Any conditions are valid:

Actor receives event key down Keyboard is down

Attribute game.Accel... < -0.1

**Move**

Direction: 270 Relative to: scene Move Type: additive

Speed: 200

**Attribute Browser**

Game	Mouse	X
Devices	Players	Y
penguin	Touches	Z
	Accelerometer	
	Screen	
	Audio	
	Clock	
	Platform	

**Rule: When all votes are counted, board Air Force One**

Attributes

Name	penguin	text
Time	0	real
Position		point
Size		size
Rotation	0	angle
Color		color
Image	penguin tiny	image
Tags		text
Preload Art	<input type="checkbox"/>	boolean
Graphics		attributes
Motion		attributes
Physics		attributes

Library Behaviors Images Sounds Fonts

Project Purchased

redwhit... penguin... vote but... usa air f...

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Follow the pattern of the Rule: Waddle Right to complete the Waddle Left rule.

Follow the pattern of the Rule: Waddle Down to complete the Waddle Up rule.

Open the GameSalad Viewer app on your phone. On the computer, in GameSalad, press the Preview on iPhone button at the top of the window to test your game in on your phone.