

# App Inventor For Android: Graffiti App

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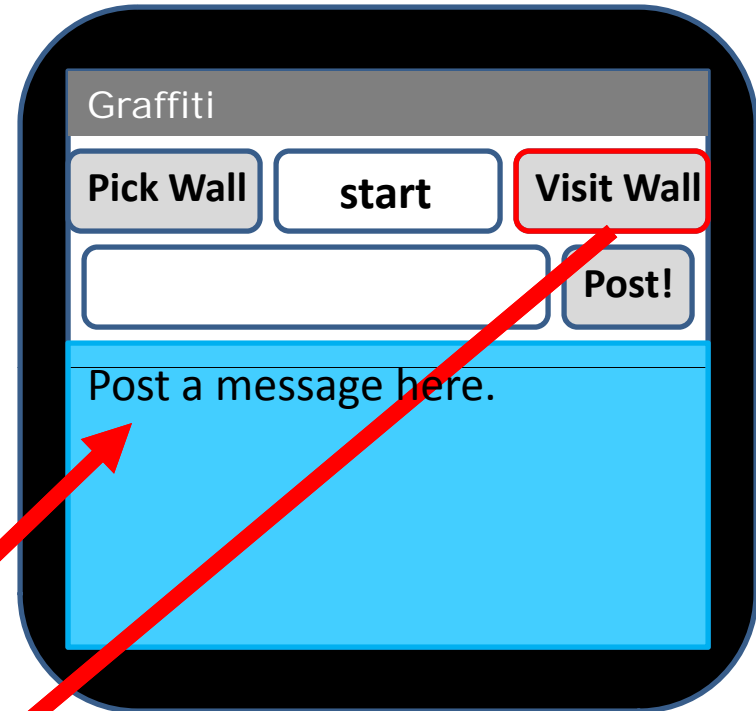


# Reading Virtual Walls

Phone 1



Phone 2



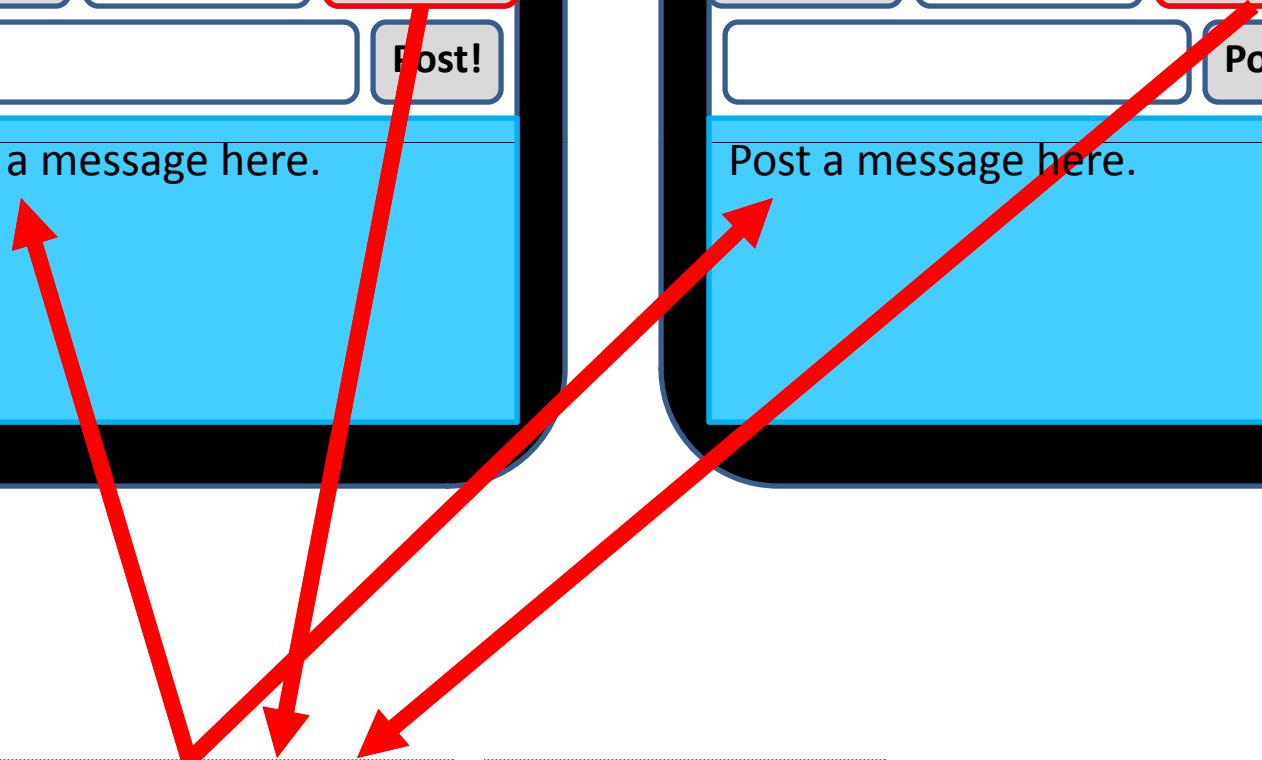
**Walls:**

Post a message here.

This is a test wall

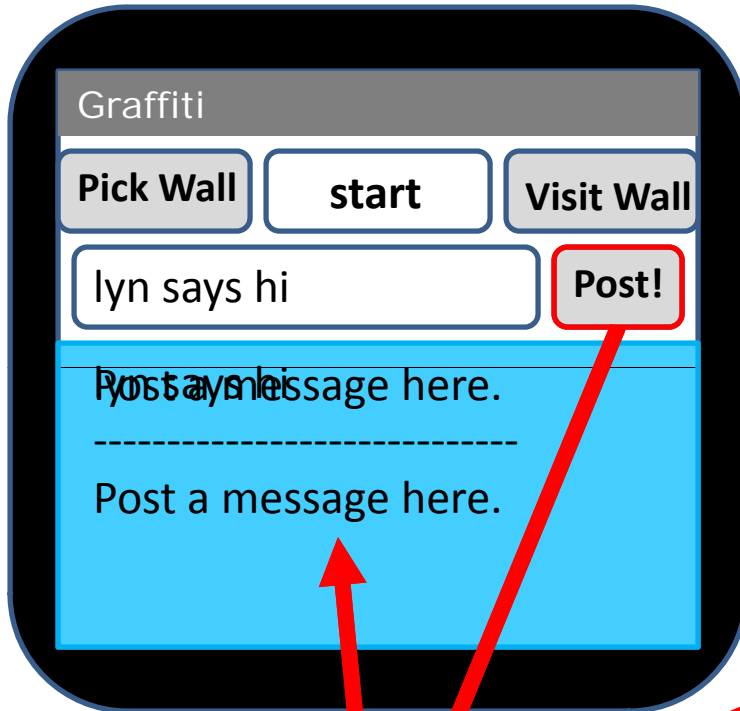
**start**

**test**



# Writing Virtual Walls

Phone 1



Phone 2



**Walls:**

lyn says hi

-----  
Post a message here.

**start**

This is a test wall

**test**

# Creating Virtual Walls

Phone 1



Phone 2



**Walls:**

lyn says hi  
-----  
Post a message here.

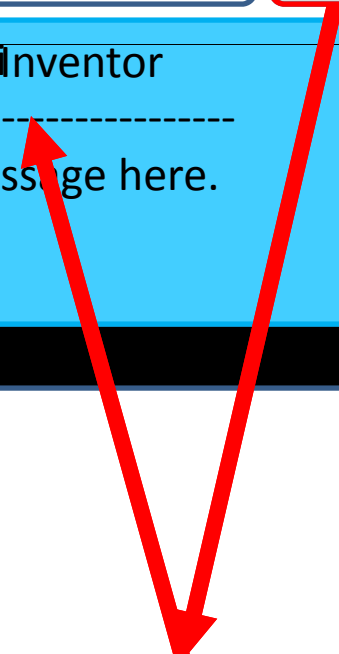
**start**

This is a test wall

**test**

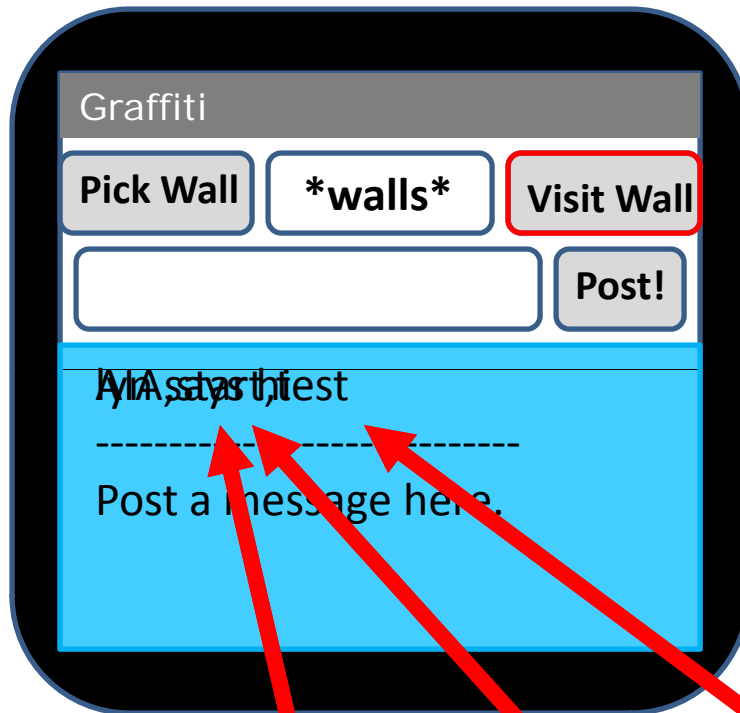
I like App Inventor

**AIA**



# The Wall named *\*walls\** is Special

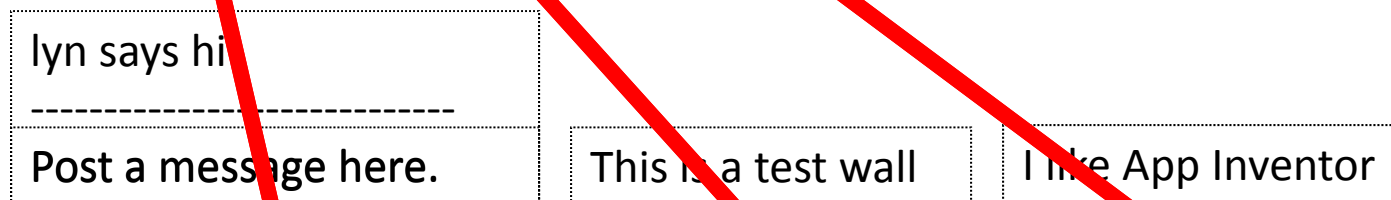
Phone 1



Phone 2



**Walls:**



start

test

AIA

# Can Select a Wall via Pick Wall Menu

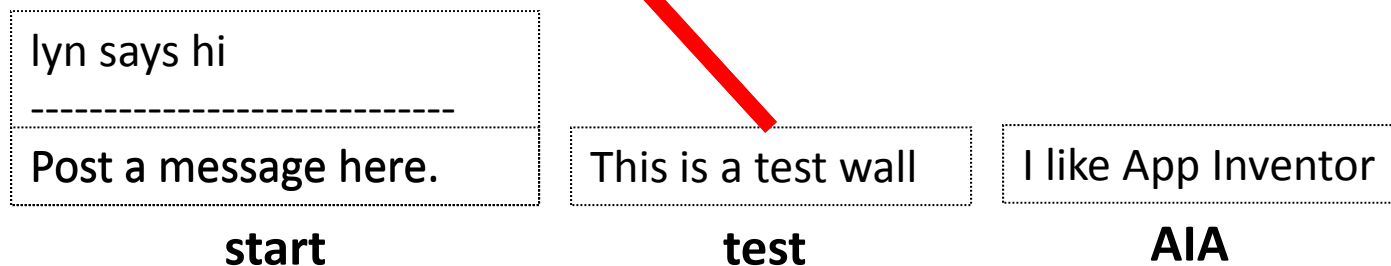
Phone 1



Phone 2



**Walls:**



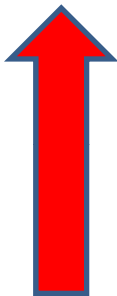
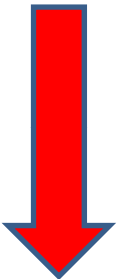
# Try it Out!

- <http://androidblocks.googlelabs.com/ode/Ya.html>
- Projects > Graffiti
- Package for Phone > Show Barcode
- Read barcode via Barcode Scanner
- Play with the app.

# Graffiti Web Service: Getting a Value

getvalue  
tag: test

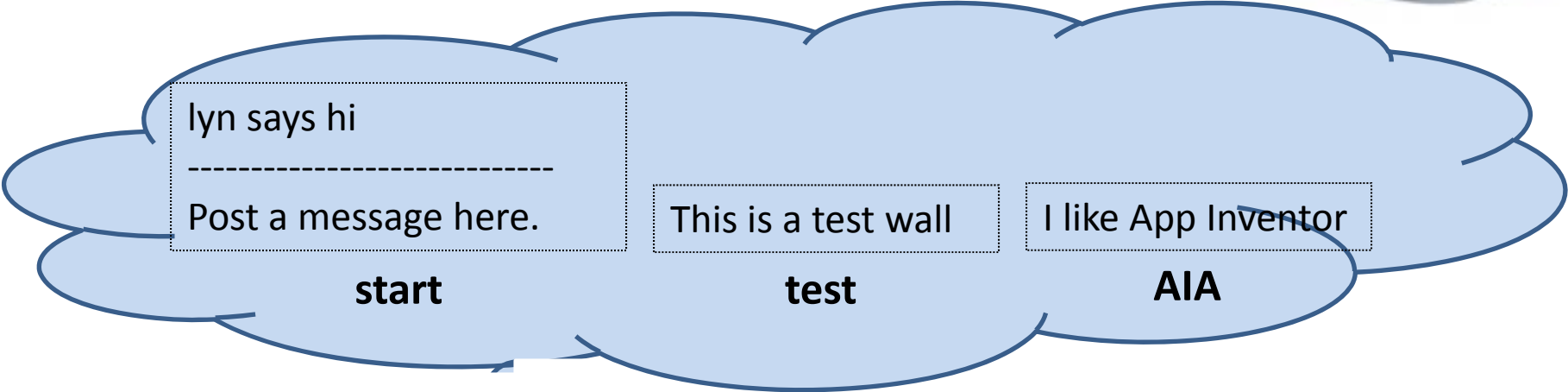
["VALUE", "test", "This is a test wall"]



**Graffiti Web Service API**



**Wall Database**





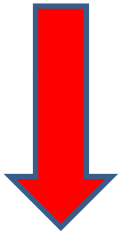
# Graffiti Web Service: Storing a Value

**storevalue**

tag: test

Value: "kilroy was here"

["STORED", "test", "kilroy was here"]



**Graffiti Web Service API**



**Wall Database**

lyn says hi

Post a message here.

kilroy was here

**This is a test wall**

I like App Inventor

**start**

**test**

**AIA**

# Interacting with the Graffiti Web Service

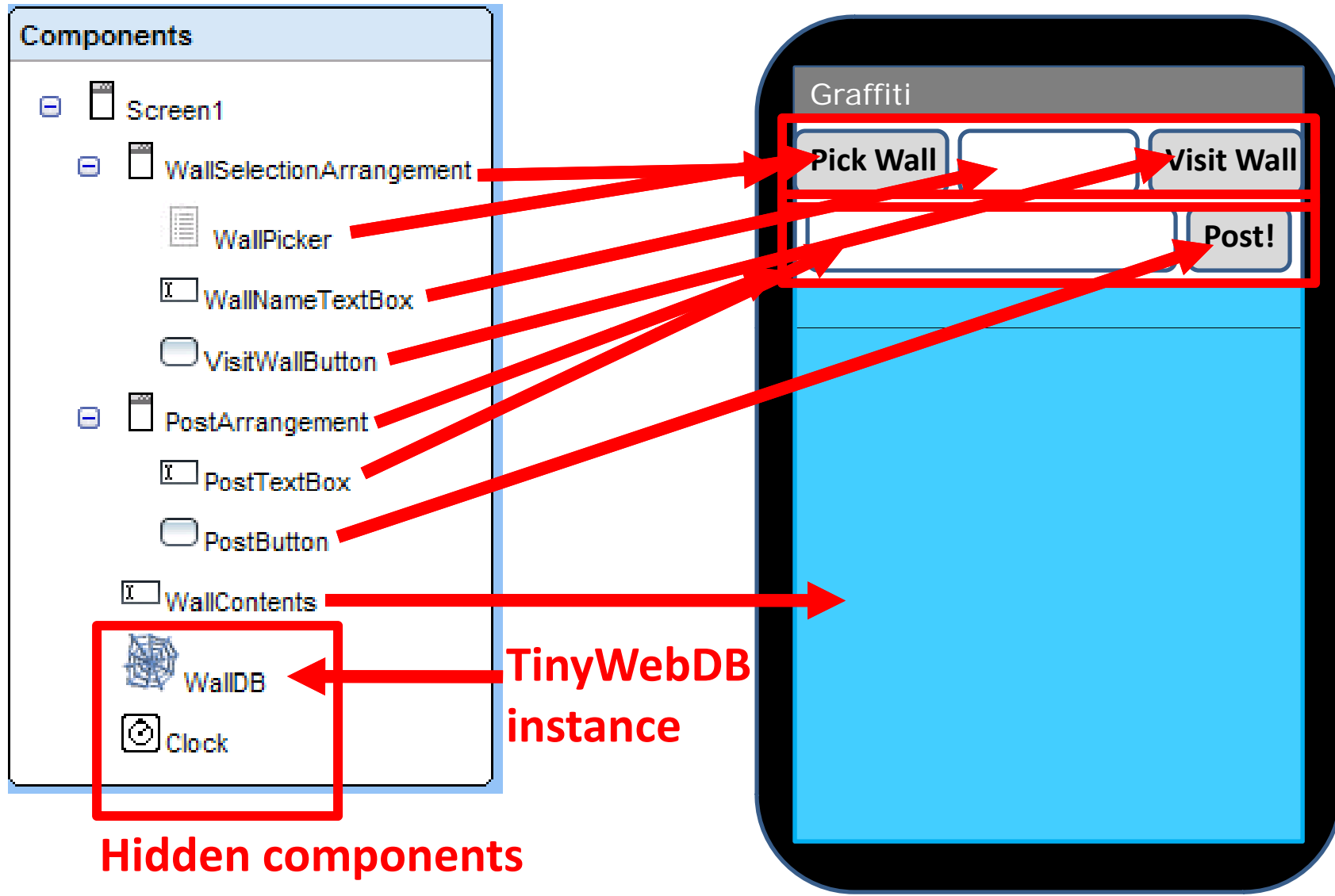
## 1. Via Browser:

Visit <http://lyng-graffiti.appspot.com/>

## 2. Via AIA TinyWebDB Component:

Will see how to do this in a few slides.

# Graffiti Components



# Graffiti Blocks: Three Parts

1. Getting contents of wall specified in text box.
2. Posting to the wall specified in text box.
3. Implementing Pick Wall button.

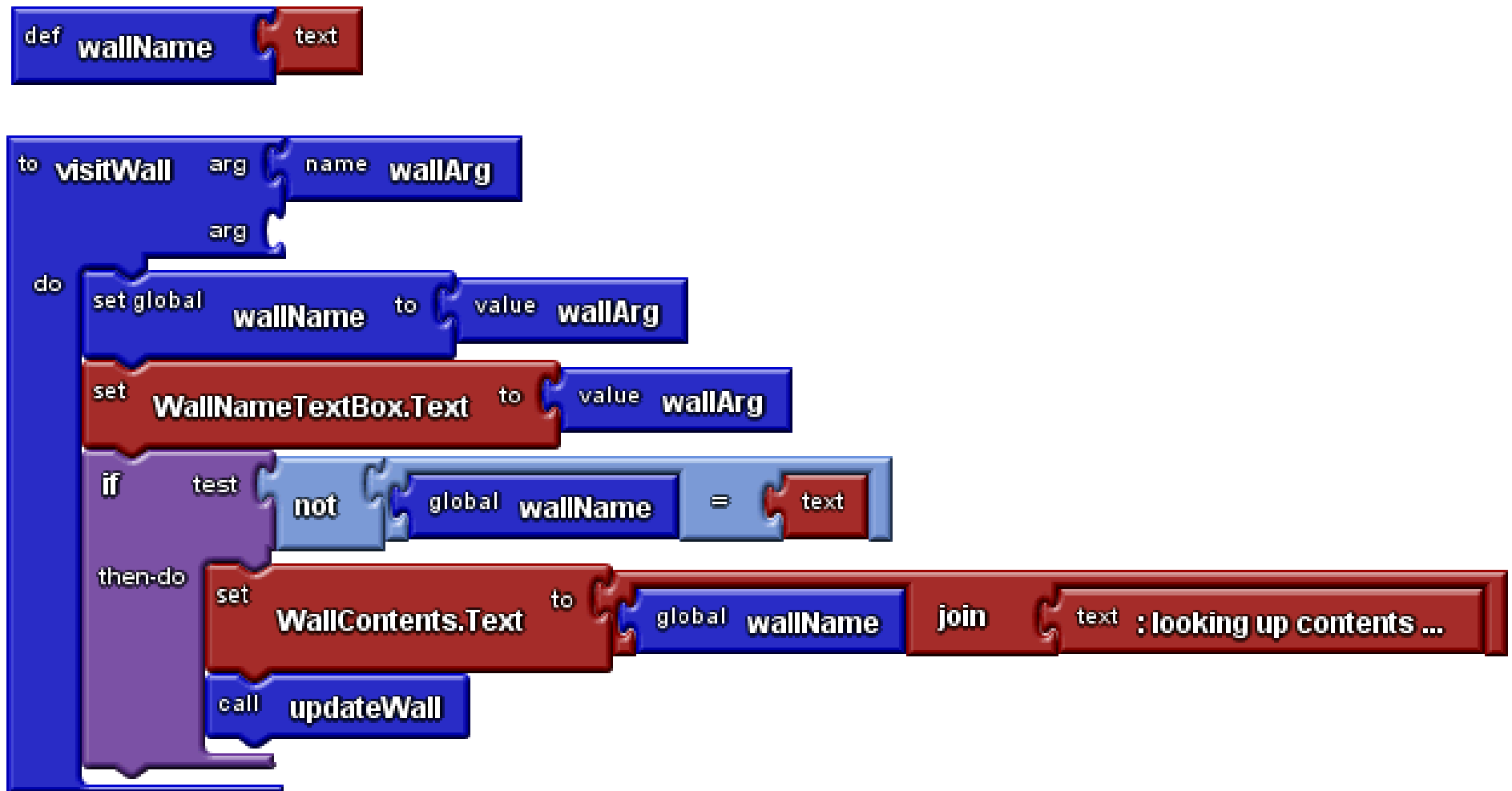
# Graffiti Blocks: Three Parts

- 1. Getting contents of wall specified in text box.**
2. Posting to wall specified in text box.
3. Implementing Pick Wall button.

# Getting a Wall: Calling the visitWall Procedure



# Getting a Wall: Defining the visitWall Procedure



# Getting a Wall: the updateWall Procedure



Properties: TinyWebDB	
ID	WallDB
ServiceURL	http://lyng-graffiti.appspot.com





# Getting a Wall: Timer-based Updates

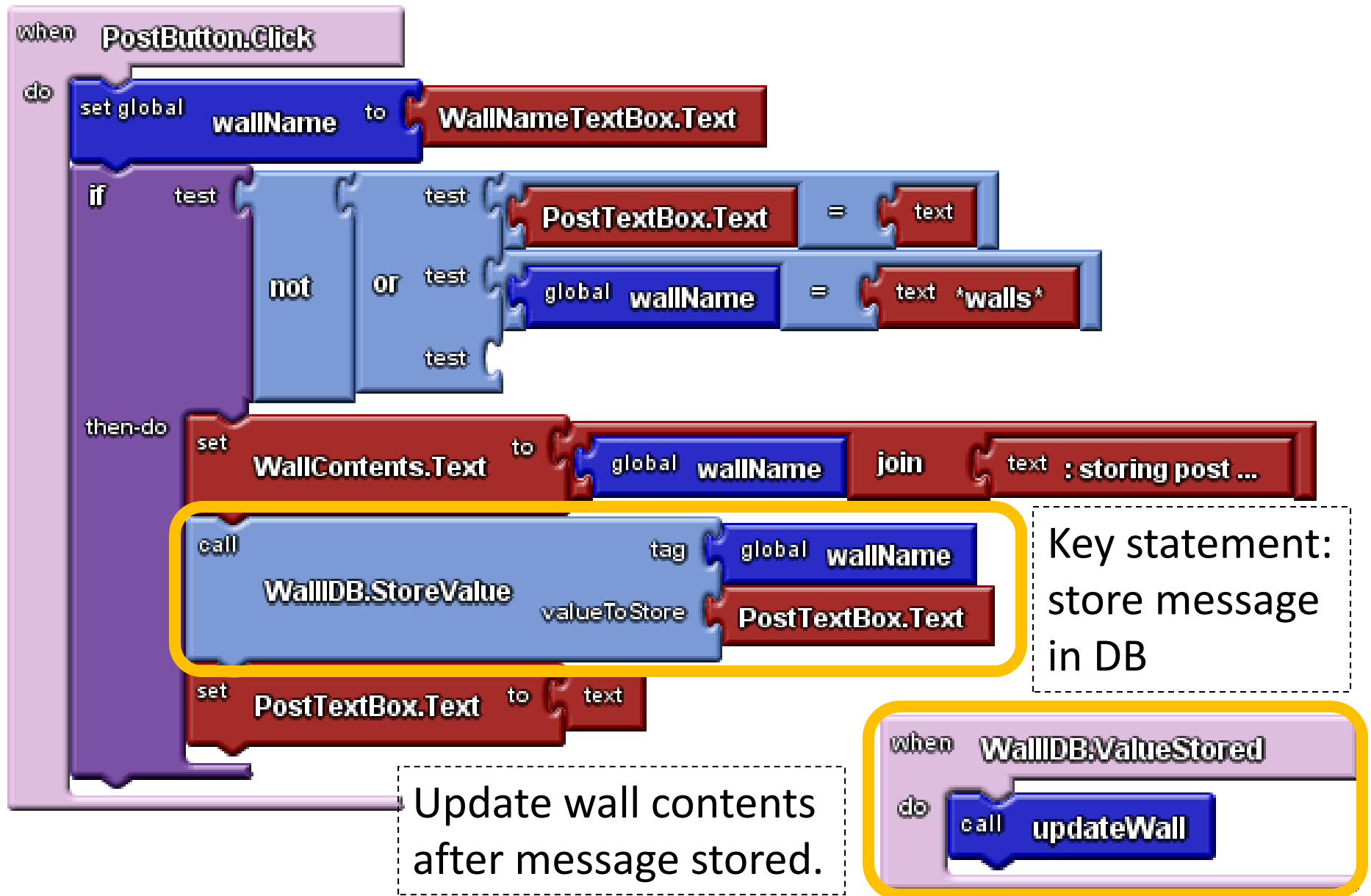


Properties: Clock	
ID	<input type="text" value="Clock"/>
TimerInterval	<input type="text" value="10000"/>
TimerEnabled	<input checked="" type="checkbox"/>
TimerAlwaysFires	<input type="checkbox"/>

# Graffiti Blocks: Three Parts

1. Getting contents of wall specified in text box.
- 2. Posting to wall specified in text box.**
3. Implementing Pick Wall button.

# Posting to a Wall



# Graffiti Blocks: Three Parts

1. Getting contents of wall specified in text box.
2. Posting to wall specified in text box.
- 3. Implementing Pick Wall button.**

# Picking a Wall: Looking up Wall Names

```
def wallsString
```

```
text
```

Initially the empty string; will become a comma-separated list of wall names, such as "AIA,berlin,start"

```
to updateWall arg
```

```
do
```

```
call WallDB.GetValue tag global wallName
```

```
call WallDB.GetValue tag text ^walls^
```

Additional code to look up wall names

```
when WallDB.GetValue
```

```
tagFromWebDB name tagFromWebDB  
valueFromWebDB name valueFromWebDB
```

```
do
```

```
if test value tagFromWebDB = global wallName
```

```
then-do set WallContents.Text to value tagFromWebDB join text contents:n join value valueFromWebDB
```

```
if test value tagFromWebDB = text ^walls^
```

```
then-do set global wallsString to value valueFromWebDB
```

```
set WallPicker.Enabled to true
```

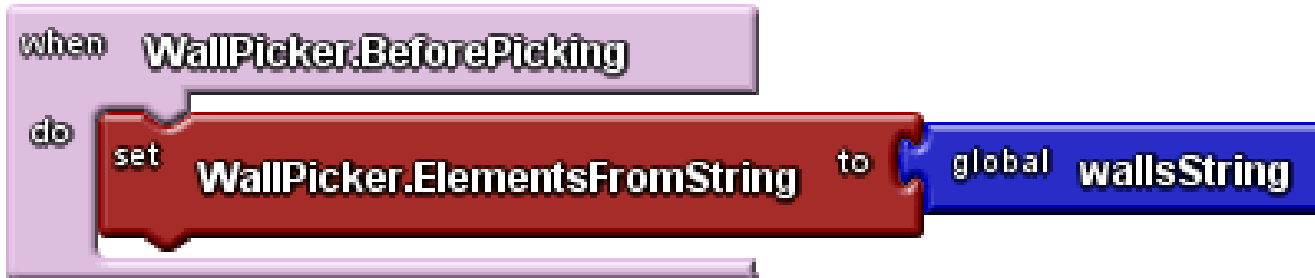
```
if test value tagFromWebDB = text ^walls^
```

```
then-do set global wallsString to value valueFromWebDB
```

```
set WallPicker.Enabled to true
```

Additional code to process wall names

# Picking a Wall: ListPicker Methods



# Other Ways to Use TinyWebDB

- Hal Abelson's simple database: e.g.,
  - store lists of words for Mad Libs
  - give English translations for Spanish words
  - associate countries names with flags
- Ellen Spertus's radio client
- Dave Wolber's Amazon client
- Eni Mustafaraj's voting app

# Wellesley's CS114 Socio-Techno Web Class

- Taught by Takis Metaxas (lecture) and Eni Mustafaraj (lab instructor). I was “evangelist”.
- 17 students; 12 did apps for final project
- Sample projects:
  - Rumor generator
  - Interactive Wellesley Tour
  - Got Places?
  - Who's Keeping Score?



# Extensions

Some things to try:

- Include email address of sender  
(use EmailUserAddress of a Voting component)
- Use BarcodeScanner component to “read”  
wall names (a la Sharon Perl’s Wallz app).
- Tutorials and sample applications at  
<http://sites.google.com/site/appinventorhelp>