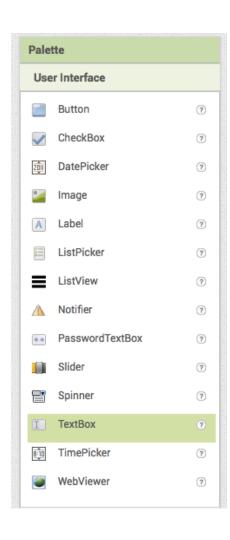
# CS4HS 2017-18 Workshop 2

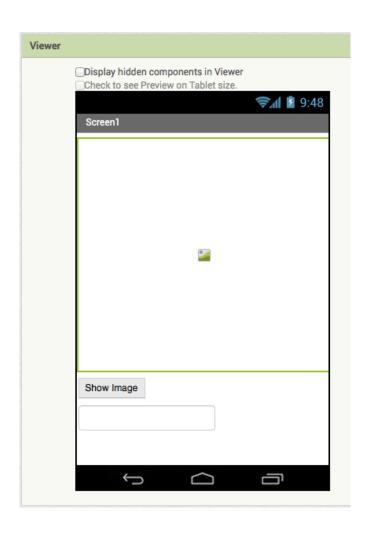
### Applnventor

- Block based programming environment developed at MIT
- Programs can run on an Android device or an Android Simulator
- Mobile Computer Science Principles Course
  - http://mobile-csp.org/

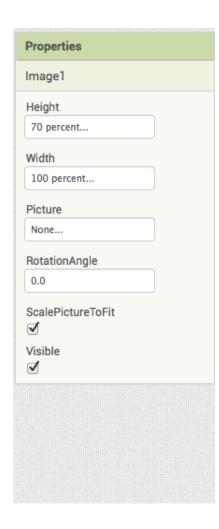
# **AppInventor**

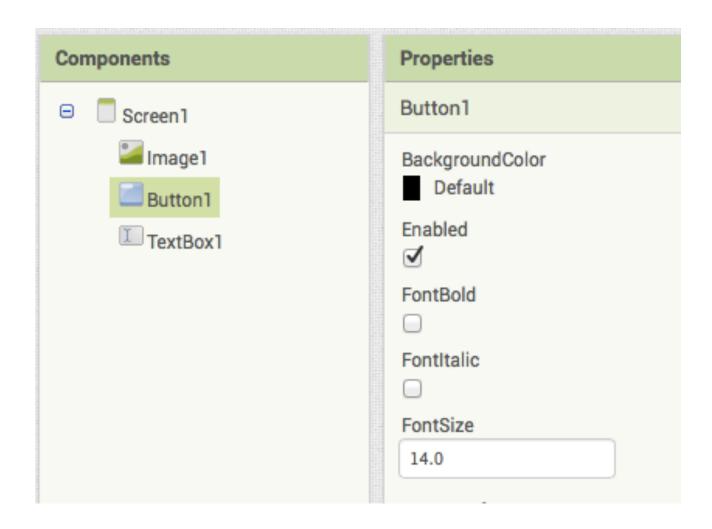








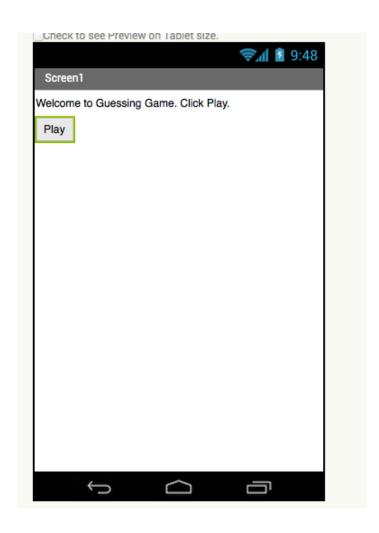




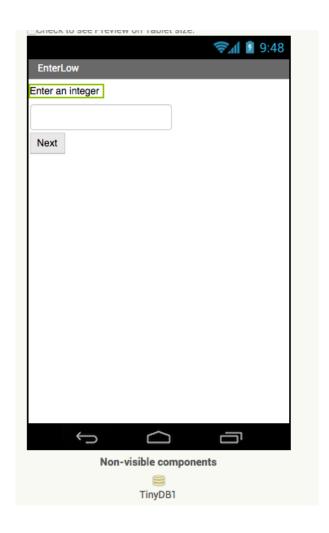
### AppInventor Block Development



### Screen 1



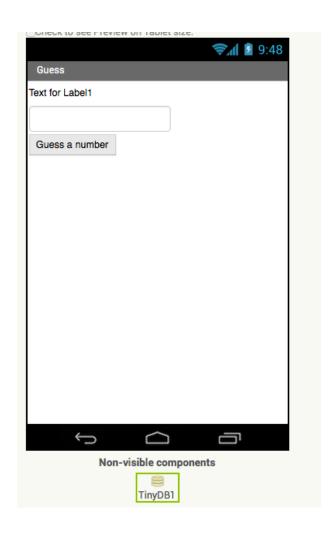
#### **EnterLow Screen**



# EnterHigh Screen

EnterHigh		<b>হ</b> না 🛭 9:48	
Text for Label1			
Begin			
J			
	isible compone		
	E TinyDB1		

### **Guess Screen**



#### Start Screen Code

```
when Button1 .Click
do open another screen screenName ( EnterLow "
```

#### EnterLow Screen Code

```
initialize global low to
call TinyDB1 - .StoreValue
do
                     tag
                           " low
               valueToStore
                          TextBox1 -
                                    Text ▼
    open another screen screenName ( "EnterHigh
when EnterLow .Initialize
   do
```

### EnterHigh Screen Code 1

```
initialize global low to

when EnterHigh .Initialize

do set global low to call TinyDB1 .GetValue

tag "low"

valueIfTagNotThere "0"

set Label1 . Text to pioin "Enter a integer greater than"

get global low ...
```

### EnterHigh Screen Code 2

```
when Button1 .Click

do call TinyDB1 .StoreValue

tag "high"

valueToStore TextBox1 . Text

open another screen screenName "Guess"
```

#### Guess Screen Code 1

```
initialize global low to
initialize global high to
initialize global answer to
initialize global guess to
```

#### Guess Screen Code 2

```
Guess - Initialize
do
    set global low - to
                       call
                           " low
                                           tag
                                                 " 0 "
                             valueIfTagNotThere
    set global high - to
                        call
                           " (high) "
                                           tag
                              valuelfTagNotThere
                                                 " 100 "
    set Label1 . Text to
                             🧔 join (
                                       "Guess a number between
                                       ioin
                                                get global low -
                                                   join
                                                           and
                                                          get global high -
    set global answer - to
                          random integer from get global low
                                                             to 🥊 get global high
```

#### **Guess Screen Code 3**

```
Button1 - .Click
when
                         TextBox1
    set global guess - to
do
                                     Text -
    to true -
    if
               get global guess - et global answer -
             Label1 - Text -
                                   " Correct! "
    then
                              to
             Label2 - Visible
                                     false
                                to
    else if
              get global guess 🔻
                                     get global answer 🗸
                                <-
                      . Text ✓
    then
             Label2 -
                              to
                                     Too low. Guess again
                                     Too high. Guess again
    else
             Label2 -
                      . Text ▼
                              to
```