

Lección 1

←

Lesson_1_Visualizing_Climate_Data_template

Donate to App Inventor

Screens: multiCaseScreen + - ⚙️ 🌐

📱

Phone (320 x 650)

📱

Android 5+ (Material)

🔍

🗑️

Type / to search components

User Interface

Button

CheckBox

CircularProgress

DatePicker

Image

Label

LinearProgress

ListPicker

ListView

Notifier

PasswordTextBox

Slider

Visualize Climate Data

Home Show Data

Ice Duration

1 0 -1 -1 0 1

Ice Duration

1 0 -1 -1 0 1

multiCaseScreen

HorizontalArrang

homeButton

SpacerVertical

showDataButta

LineHorizontalArr

topChartLabel

topChart

topChartData2

bottomChart

bottomChartD

spreadsheet1

Rename Delete

Media

app-inve...00f9.json

spreadsheet2

▼ Behavior

ApplicationName

google_sheets_test

CredentialsJson

app-inventor-366820-e535c

SpreadsheetID

https://docs.google.com/spr

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Accessibility: accessibility.mit.edu

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Lesson_1_Visualizing_Climate_Data_template

Donate to App Inventor

Screens: multiCaseScreen + - ⚙️ 🌐

Designer Blocks

Built-in

Control

Logic

Math

Text

Lists

Dictionaries

Colors

Variables

Procedures

multiCaseScreen

HorizontalArrang

Rename Delete

Media

app-inve...00f9.json

0 0

Show Warnings

when homeButton.Click

do open another screen screenName Screen1

when showDataButton.Click

do call topChartData2D.Clear

call spreadsheet1.ReadSheet sheetName Spirit Lake

call spreadsheet2.ReadSheet sheetName Otsego Lake

when spreadsheet1.GotSheetData

sheetData

do set topChartLabel.Text to Spirit Lake,Orleans,Iowa

call topChartData2D.ImportFromSpreadsheet spreadsheet spreadsheet1 xColumn Year yColumn Ice useHeaders true

when spreadsheet2.GotSheetData

sheetData

do set topChartLabel.Text to Otsego Lake,Cooperstown,NY

call bottomChartData2D.ImportFromSpreadsheet spreadsheet spreadsheet2

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Lección 2 y 3

←

Lessons_2_and_3_Modeling_and_Cleaning_Climate_data_template

Donate to App Inventor

Screens: drawLOBFscreen + - ⚙️ 🌐

Designer Blocks

Type / to search components

User Interface

Button

CheckBox

CircularProgress

DatePicker

Image

Label

LinearProgress

ListPicker

ListView

Notifier

PasswordTextBox

Slider

Spinner

Switch

Phone (320 x 650) Android 5+ (Material)

Climate Data: Create a Model

Home Show Data Draw Line of Best Fit

Days of Ice Cover

M = B = R =

Temperature (c)

M = B = R =

drawLOBFscreen

Appearance

AboutScreen

Climate Data: Create

AlignHorizontal

Center : 3

AlignVertical

Top : 1

BackgroundColor

#FFFAEDEF

BackgroundImage

None...

BigDefaultText

CloseScreenAnimation

Default

HighContrast

OpenScreenAnimation

Default

ScreenOrientation

Unspecified

SpacerVertical

showDataButton

SpacerVertical

drawLineOfBestFit

LineHorizontalArr

topChartLabel

topChart

topChartData

topTrendline

HorizontalArrang

topSlopeLabel

topSlopeValue

Rename

Delete

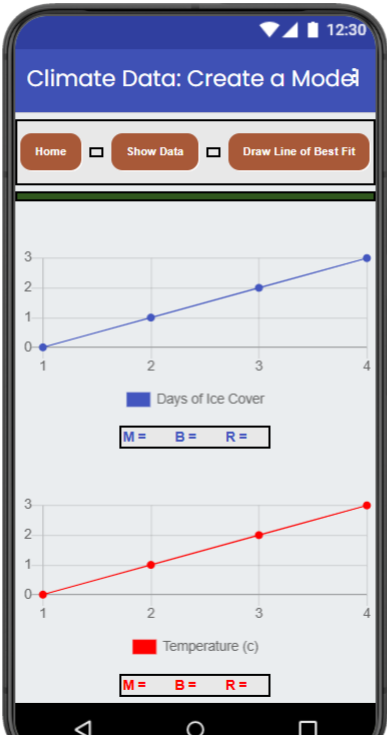
Media

app-inve...00f9.json

Upload File ...

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← Lessons_2_and_3_Modeling_and_Cleaning_Climate_Data_template

Donate to App Inventor

Screens: drawLOBFscreen + - ⚙️ 🌐

Designer Blocks

Built-in

Control

Logic

Math

Text

Lists

Dictionaries

Colors

Variables

Procedures

drawLOBFscreen

HorizontalArrang

Rename Delete

Media

app-inve...00f9.json

Upload File ...

do open another screen screenName Screen1

when showDataButton .Click

do

call topChartData2D .Clear

call bottomChartData2D .Clear

call spreadsheet1 .ReadSheet

sheetName " Spirit Lake "

when spreadsheet1 .GotSheetData

sheetData

do

set topChartLabel .Text to " Spirit Lake, Orleans, Iowa "

call topChartData2D .ImportFromSpreadsheet

spreadsheet spreadsheet1

xColumn " Year "

yColumn " Ice "

useHeaders true

call bottomChartData2D .ImportFromSpreadsheet

spreadsheet spreadsheet1

xColumn " Year "

yColumn " Temp "

useHeaders true

when drawLineOfBestFitButton .Click

do

call topChartData2D .Clear

call bottomChartData2D .Clear

call spreadsheet1 .ReadSheet

sheetName " Spirit Lake "

when spreadsheet1 .GotSheetData

sheetData

do

set topChartLabel .Text to " Spirit Lake, Orleans, Iowa "

call topChartData2D .ImportFromSpreadsheet

spreadsheet spreadsheet1

xColumn " Year "

yColumn " Ice "

useHeaders true

call bottomChartData2D .ImportFromSpreadsheet

spreadsheet spreadsheet1

xColumn " Year "

yColumn " Temp "

useHeaders true

0 0

Show Warnings

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🔍

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Lección 4

Lesson_4_Predictions_template

Donate to App Inventor

Screens: makePredictionsScreen + -

Designer Blocks

Type / to search components

User Interface

Button

CheckBox

CircularProgress

DatePicker

Image

Label

LinearProgress

ListPicker

ListView

Notifier

PasswordTextBox

Slider

Spinner

Switch

Phone (320 x 650) Android 5+ (Material)

Climate Data: Making Predictions

Home Show Data

Detect Anomalies Draw LOBF AI Analysis

Data Cleaning: Click on anomalies in this window to remove.

1 2 3 4

0 1 2 3

1 2 3 4

0 1 2 3

M= B= R= X-Int=

makePredictionsScreen

buttonHorizontal

homeButton

SpacerVertica

showDataButt

buttonHorizontal

detectAnomal

SpacerVertica

drawLineOfBes

SpacerVertica

AIAnalysisButt

blackLineHorizon

Rename Delete

Media

app-inve...00f9.json

Upload File ...

Appearance

AboutScreen

Climate Data:

AlignHorizontal

Center: 3

AlignVertical

Top: 1

BackgroundColor

#FFEADEF

BackgroundImage

None...

BigDefaultText

CloseScreenAnimation

Default

HighContrast

OpenScreenAnimation

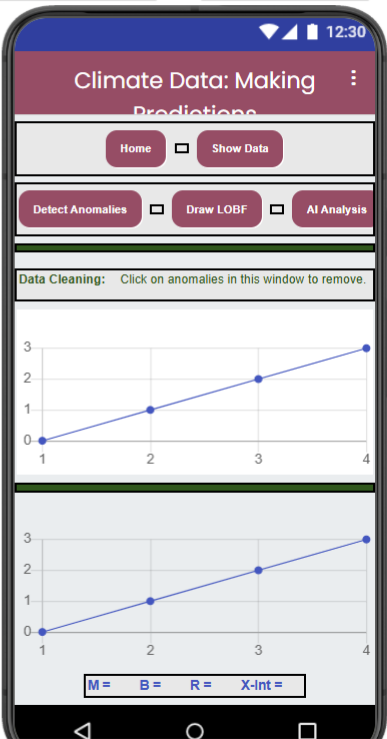
Default

ScreenOrientation

Unspecified

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Lesson_4_Predictions_template

Donate to App Inventor

Screens: makePredictionsScreen + -

Designer Blocks

Built-in

Control

Logic

Math

Text

Lists

Dictionaries

Colors

Variables

Procedures

makePredictionsSc

buttonHorizontal

Rename Delete

Media

app-inve...00f9.json

Upload File ...

Show Warnings

call cleanedChartData2D .Clear

call cleanedChartData2D .ImportFromList

list call dataCleaningChartData2D .GetAllEntries

when AiAnalysisButton .Click

do

set dataCleaningChart .Visible to false

set dataCleaningHorizontalArrangement .Visible to false

set AiResponseHorizontalArrangement .Visible to true

call ChatBot1 .Converse

question join

"Dado los siguientes datos para el número anual "

"Número de días que el lago de agua dulce estuvo ... "

call dataCleaningChartData2D .GetAllEntries

"El coeficiente de correlación para la línea de m..."

Trendline1 .CorrelationCoefficient

"La pendiente de la línea de mejor ajuste es..."

Trendline1 .LinearCoefficient

"La intersección en "Y" para la línea de mejor aj..."

Trendline1 .YIntercept

"Primero, predice el año en el que probablemente ... "

"¿Cómo se relaciona esta tendencia con el cambio ... "

"¿Qué pasa con las personas que viven cerca?"

"Limita tus respuestas a 120 palabras "

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74%

Climate Data: Making Predictions

Home

Show Data

Detect Anomalies

Draw LOBF

AI Analysis

Spirit Lake, Orleans, Iowa

Basándome en la pendiente negativa y la intersección de la línea de mejor ajuste, predeciría que el lago probablemente no se congele por completo alrededor del año 2030.

Esta tendencia está relacionada con el cambio climático debido al calentamiento global, que aumenta las temperaturas promedio a nivel mundial. Esto lleva a períodos más cortos de congelación en lagos y cuerpos de agua.

La disminución del hielo afecta a las personas que viven cerca ya que puede afectar la pesca, el transporte acuático y la vida silvestre. También puede aumentar los riesgos de inundaciones.

