



Universidade de Federal do ABC

Engenharia Unificada I - Protótipo de *Pinball*

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Breve história do *Pinball*



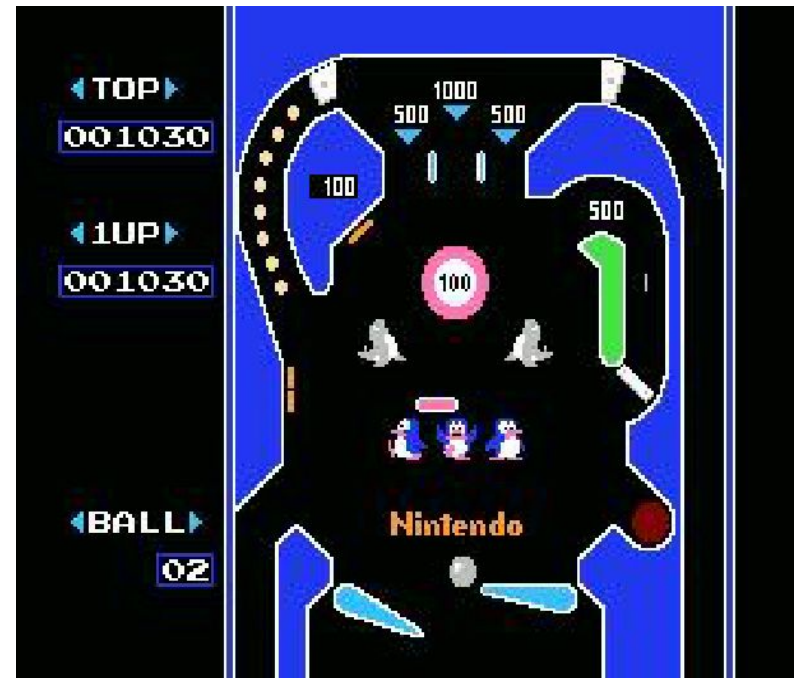
Bagatelle



Máquina de *Pinball*



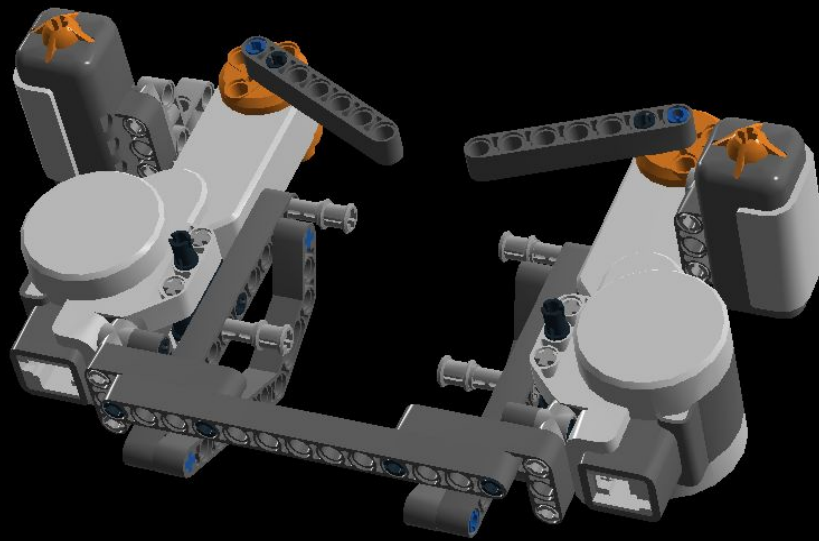
Video Pinball - Atari



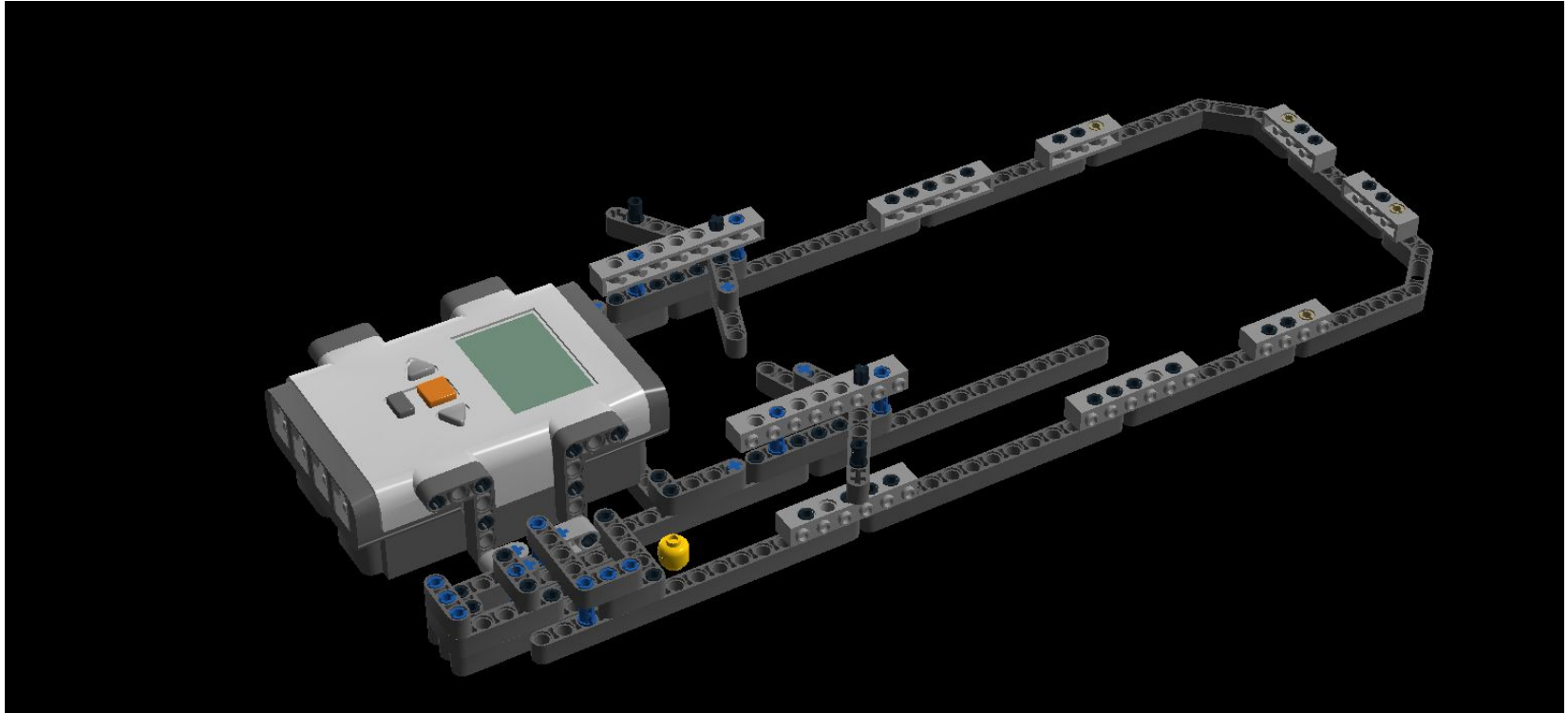
Pinball Wizardry - Nintendo

Montagem e *Design*

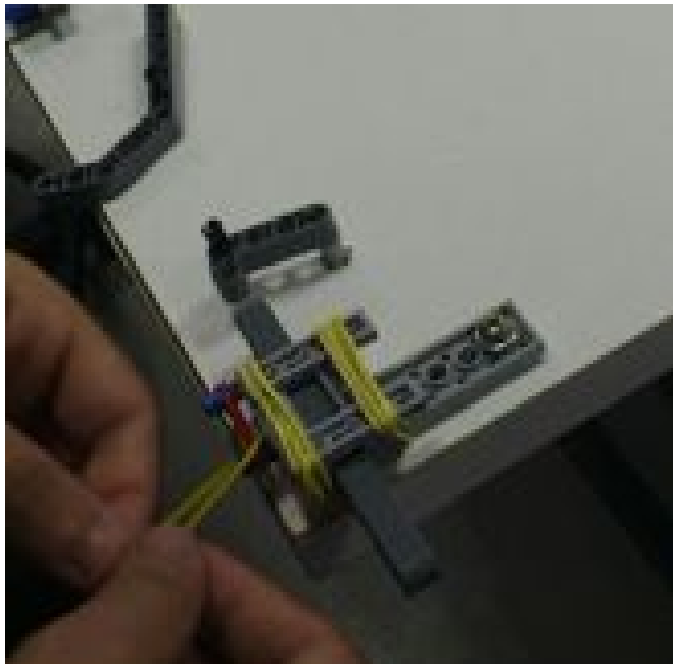
Primeira versão



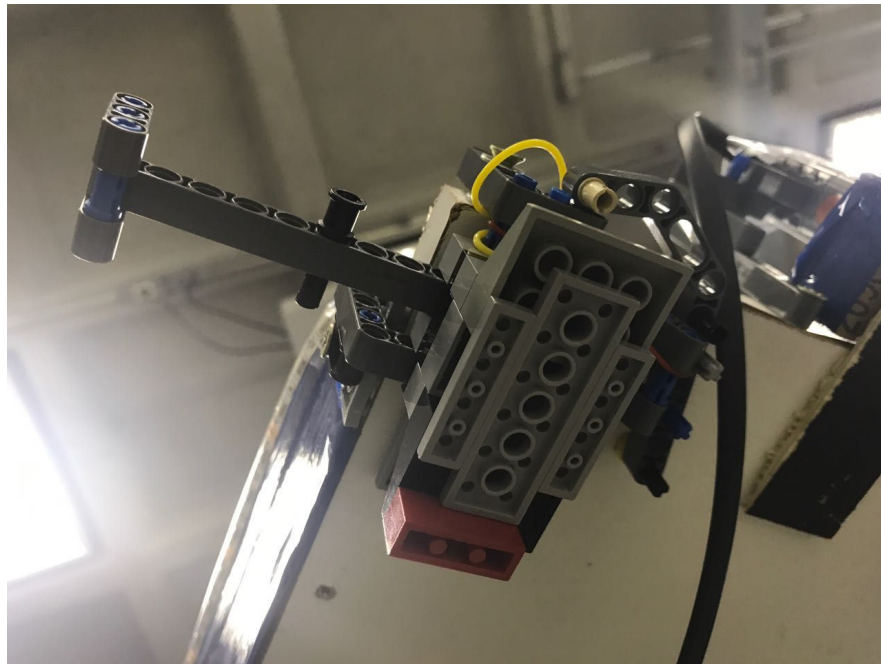
Segunda versão



Mecanismos das aletas



Inicial



Final

Motores



A

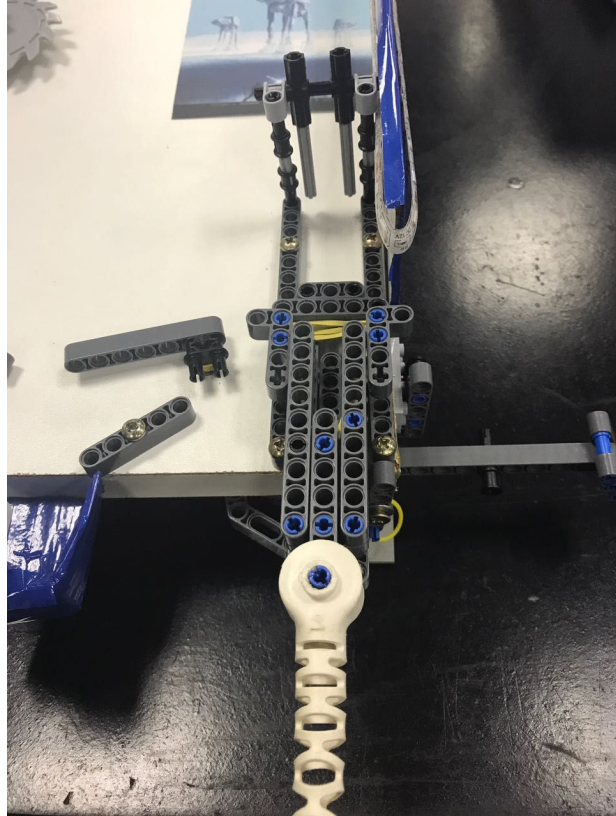


B

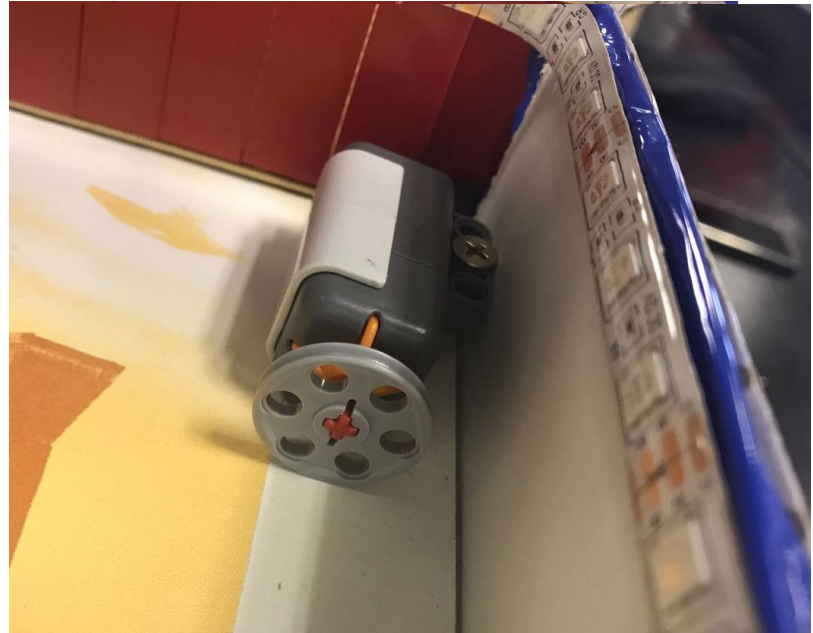


C

Lançador



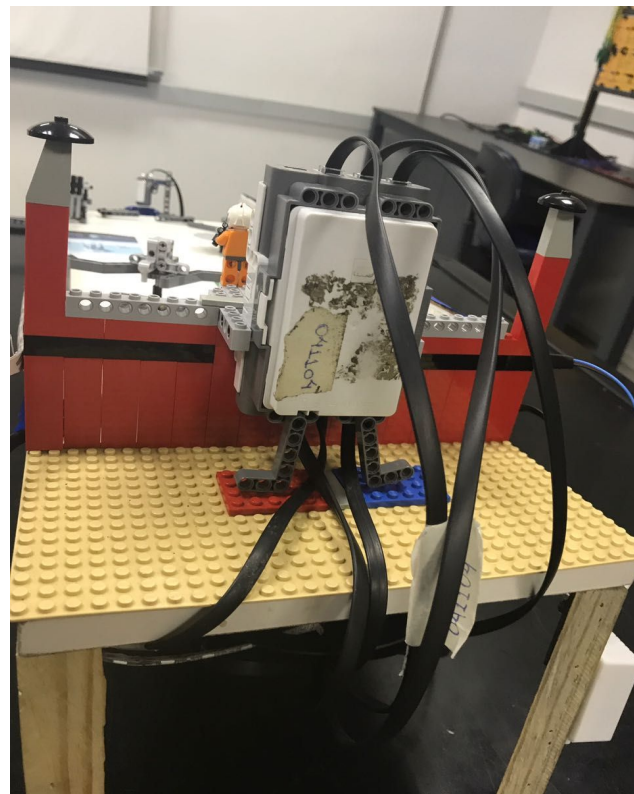
Sensores de toque



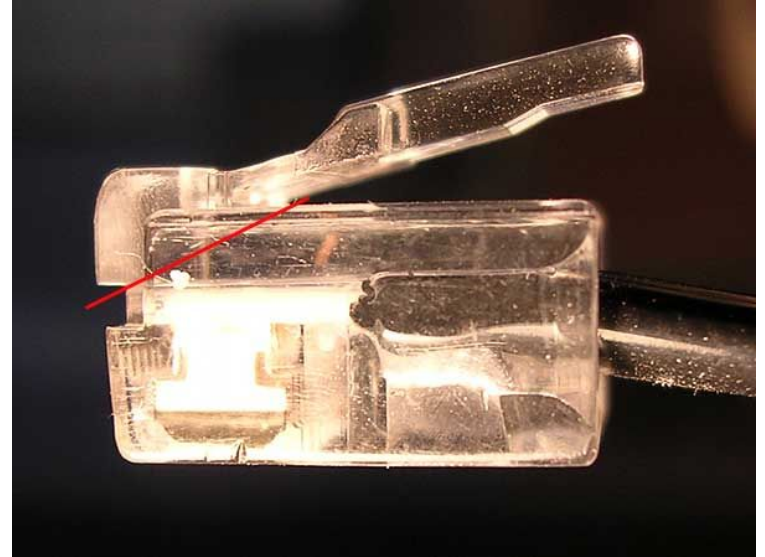
Sensor de luz



NXT

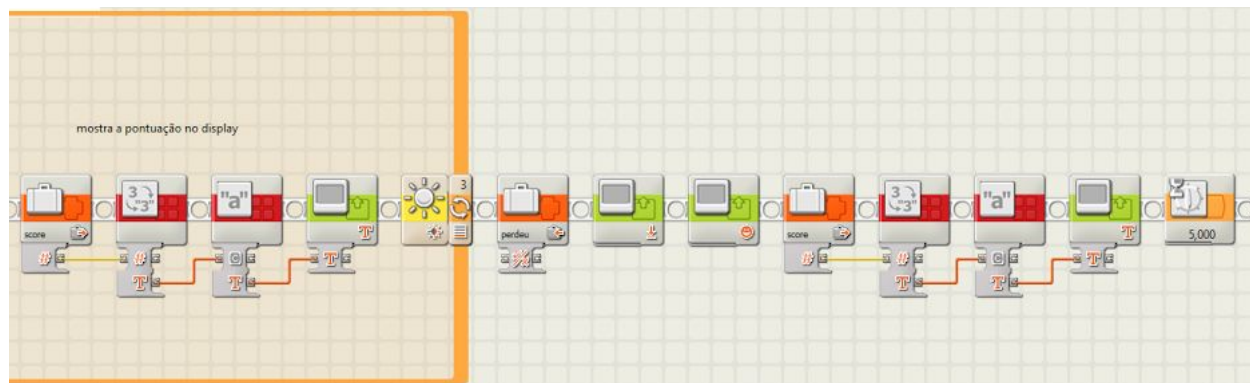
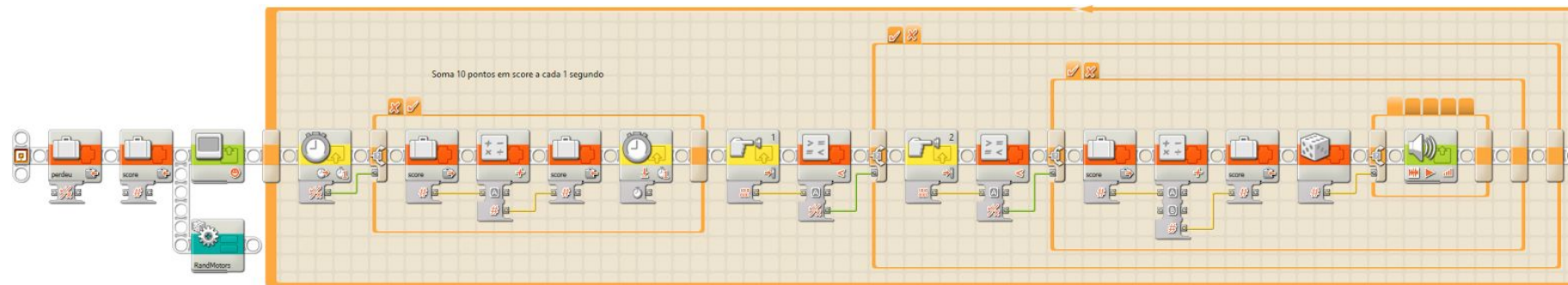


Cabos

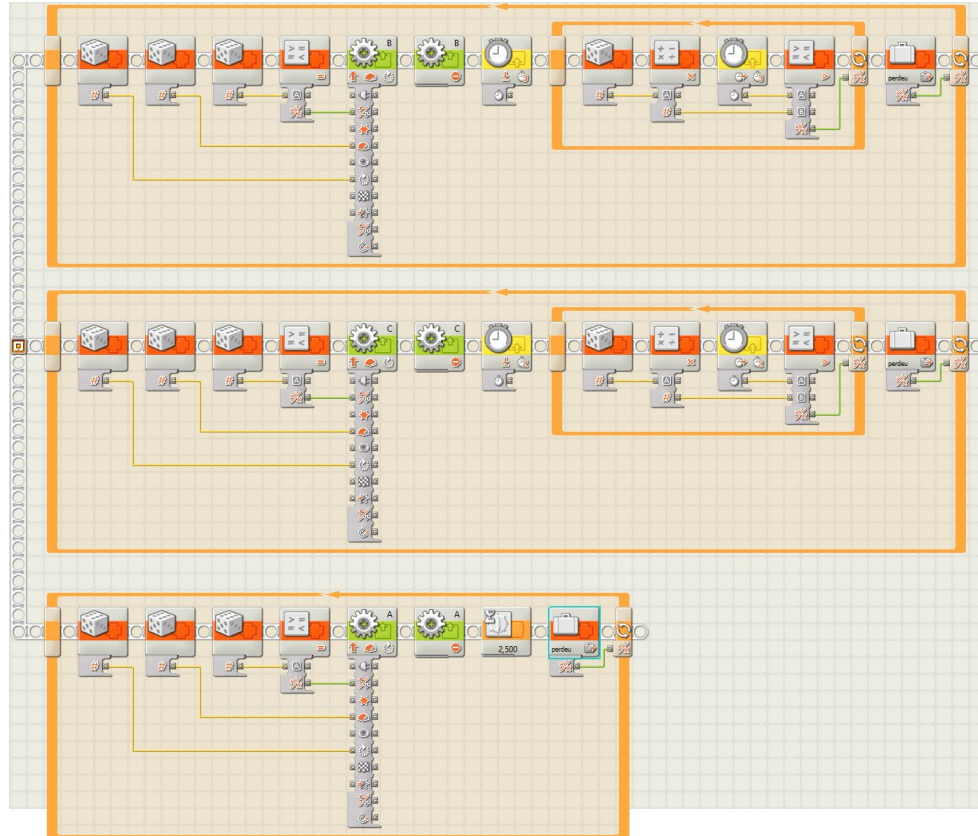


Programação

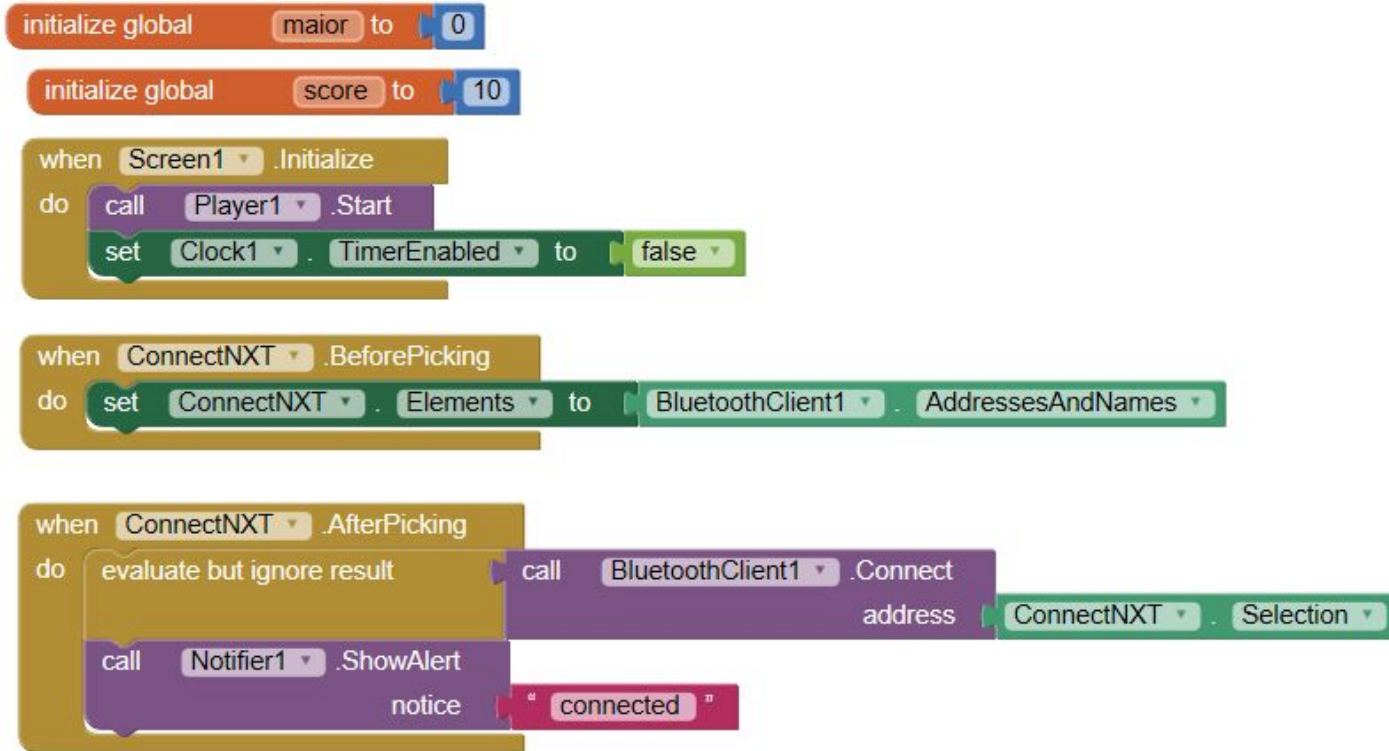
MINDSTORMS



MINDSTORMS



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```
when Play.Click
do
  set Textos.Text to "POINTS"
  set ConnectNXT.Visible to false
  set Play.Visible to false
  set HorizontalArrangement1.Visible to false
  set HorizontalArrangement5.Visible to false
  set NxtTouchSensor1.PressedEventEnabled to true
  set NxtTouchSensor2.PressedEventEnabled to true
  set NxtLightSensor1.AboveRangeEventEnabled to true
  set Pontos.Visible to true
  set Pontos.FontSize to 70
  set Pontos.Text to 0
  set Clock1.TimerEnabled to true
  call NxtDirectCommands1.StartProgram
  programName "pinball v3.rxe"
```

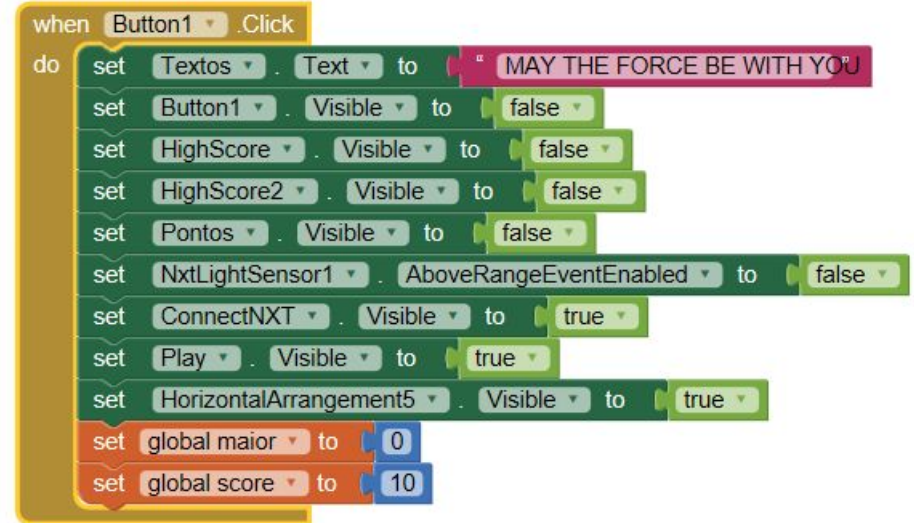
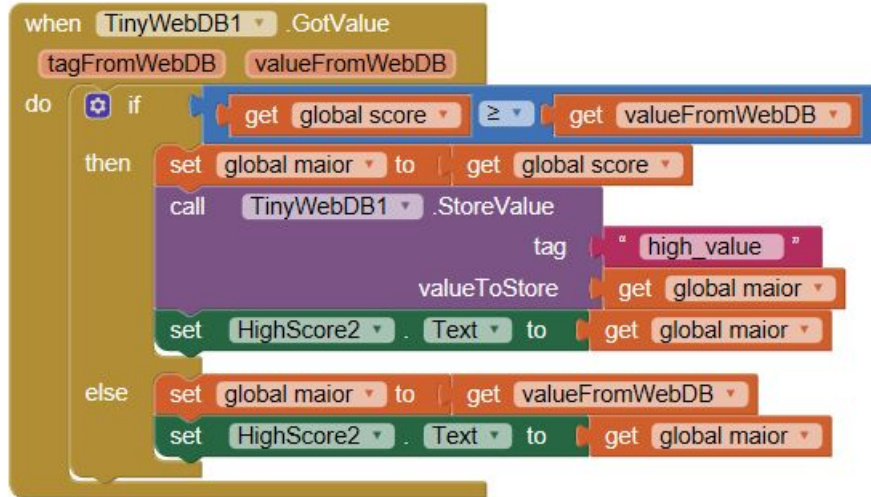
```
when Clock1.Timer
do
  set global score to (get global score) + 10
  set Pontos.Text to (get global score)
```

```
when NxtTouchSensor1.Pressed
do
  set global score to (get global score) + 200
```

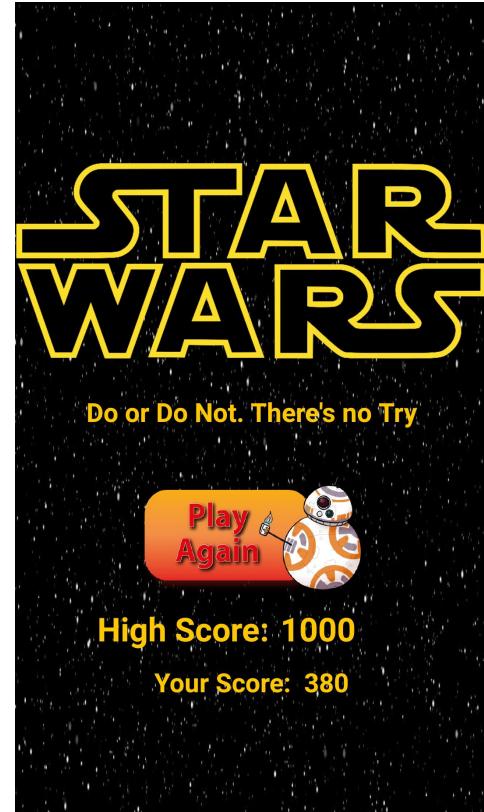
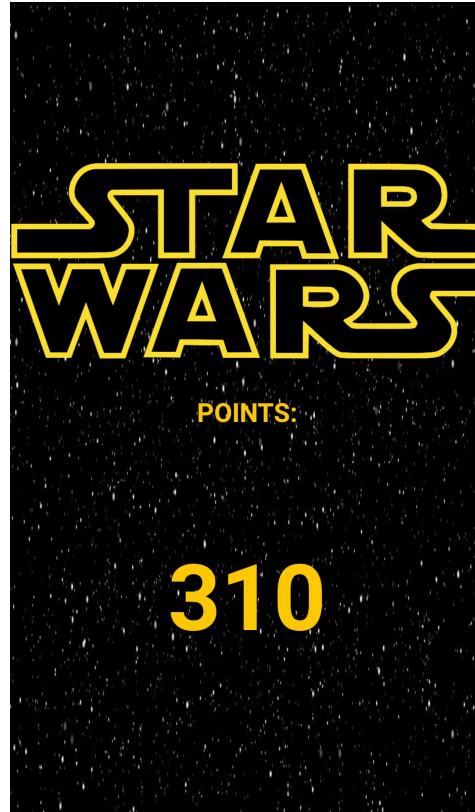
```
when NxtTouchSensor2.Pressed
do
  set global score to (get global score) + 100
```

```
when NxtLightSensor1.AboveRange
do
  set Textos.Text to "Do or Do Not. There's no Try"
  set Clock1.TimerEnabled to false
  set NxtTouchSensor1.PressedEventEnabled to false
  set NxtTouchSensor2.PressedEventEnabled to false
  call TinyWebDB1.GetValue
  tag "high_value"
  set Pontos.FontSize to 20
  set Pontos.Text to (join "Your Score:" (get global score))
  set Button1.Visible to true
  set HorizontalArrangement1.Visible to true
  set HorizontalArrangement4.Visible to true
  set HighScore.Visible to true
  set HighScore2.Visible to true
```

MIT APP INVENTOR



DESIGN



SENSOR DE TOQUE



VERSÃO FINAL

