

Physics 2
(Coding part)

HELLO!

My name's Carlos

Any questions or suggestions, send me
an email at my username in the internal
virtual campus:

carlosrz



Subject presentation

Don't worry! There's no heavy
stuff today...

Pinball (2D Physics Game)

1. Box2D Library Integration (library) as a module
2. Creation of basic shapes
3. Simulating the world
4. Collision detection
5. Joints



Racing Game (3D Physics Game)

1. First contact with OpenGL
2. Bullet Library Integration
3. Collision detection
4. Bullet constraints
5. Vehicle creation
6. Sensors



Evaluation!

Pinball (Box2D)

Deadline: 25th October

Weight: 15% of the total

Racing Game (Bullet)

Deadline: 20th December

Weight: 30% of the total



And a 5% of attitude.

Both games must implement a **full win / lose cycle** and show **best score or timer**.

Attention!

The assignment must be done in **pairs** and deliveries must be submitted before 23:59 of the corresponding day.

Evaluation Rules

The graphics is **not** our main goal.

The gameplay is **more** important but it's not our priority.

The **code quality** is **fundamental**! Code must be clear, consistent and optimal.
Each project must be completely different!

Evaluation Rules

The delivery will be a link to the executable in Release on the repository with the following format:

lastname1_name1_lastname2_name2

A crashing or unplayable game will not be evaluated!

What will we use?

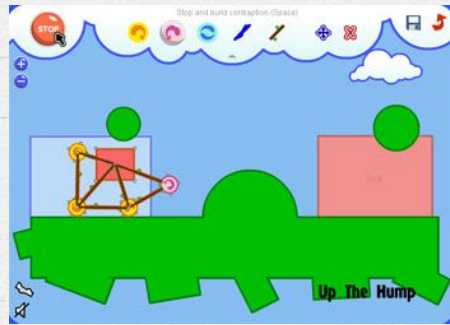
[Visual Studio 2017](#)

[Box2D library](#) and its corresponding [documentation](#)

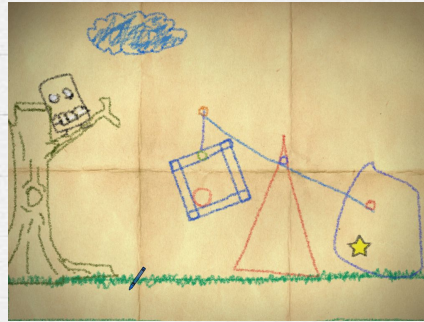
[Bullet library](#) and its corresponding [documentation](#)

A [GitHub](#) repository

Some examples of Box2D games...



Fantastic Contraption

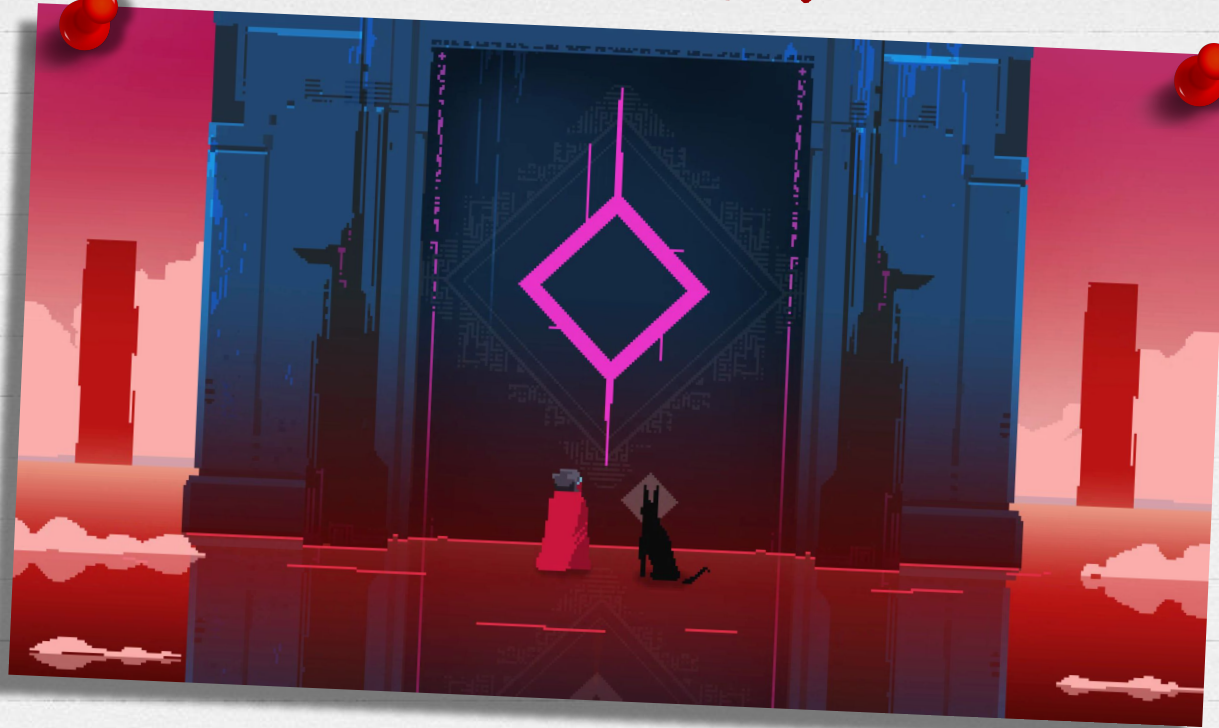


Crayon Physics Deluxe



Angry Birds

YOUR TURN !



LOOK FOR A PINBALL GAME!

1. Pick your faithful partner!
2. Surf the web and pick a pinball game that you'd like to copy. Here you have some useful links:
 - a. <http://www.classicgame.com/Pinball>
 - b. <http://www.freewebarcade.com/pinball-games.php>
 - c. Or any other website that you might find...
3. Go to this [spreadsheet](#) and fill in your couple names and a link to the chosen pinball game



HOMEWORK

- X Try to compile and run [HelloWorld.cpp](#) at home in Visual Studio 2017. To do that, you will have to link Box2D library.
- X Remember to choose a 2D perspective pinball and fill in the [spreadsheet!](#)

NEXT WEEK . . .

Box2D library
integration