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## 1.Description of the package.

From cardboard buddies we pretend to give the best packages to our customers with simplicity and transparency. This package allows the user to create a realtime trading interface that simulates a stock market value.

This asset contains the following:

- Scripts that generate the chart from generated data.
- Scripts that control the realtime ticks.
- Scripts that change the appearance of the chart and its parts.
- Scripts that control the selectable line and gives the values of the chart.
- Buying, selling and closing operations with a specific volume.

The asset contains the necessary models, textures and prefabs shown in the video.

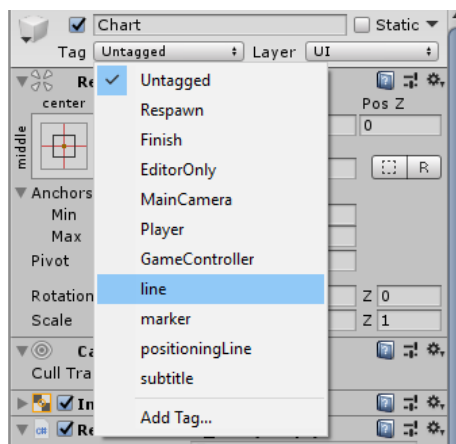
For further information please contact [michael.soler.beatty@gmail.com](mailto:michael.soler.beatty@gmail.com).

## 2.Dependencies of the package (importing).

This package does not need any other package to work.

## 3.Colliders, tags and physics

UI elements are used to generate events. Please check that the following tags are in your project:



## 4.Scripting and dynamics

We use videotutorials to explain the package dynamics and the scripts. The main scripts used in this asset are.

```
public class GenerateDataStream : MonoBehaviour
{
    //public initial capital and benefit
    public float capital;
```

```

public float initialCapital=1000;
Text capital_txt;
Text benefit_txt;

// line parameters
[Range(0,15)]
public float L_width = 5f;

[Range(0, 15)]
public float M_width = 5f;

[Range(2, 10)]
public int nb__div = 5;

[Range(0, 10)]
public int HL_width = 1;

[Range(0, 500)]
public int nb_initial_Ticks = 200;

public int arraySize = 100000;

// line prefab for UP and DOWN behaviour
public GameObject prefab_UP, prefab_DOWN, prefab_HORIZ;

//time counting event
float elapsed=100000, elapsed2;

//these two arrays contain the values for the line chart
public float[] x_value;
public float[] y_Open_value;
public float[] y_Close_value;
public float[] y_min_value;
public float[] y_Max_value;

//maximum values for x and y
public float xmax, ymax, xmin, ymin;

//tick_latency [s]
public float tick_latency=1;
//tick_duration [s]
public float tick_duration = 10;

//this is the value of the market at the instant given
float y_value;

//this is the initial conditions for the simulation
public float min_seed_value = 100;
public float max_seed_value = 200;
public float vol=10;

//these are the gameobjects containing the markers
GameObject[] goMaxMin;
GameObject[] goOpenClose;

// intermediate vectors
Vector3[] vMax ;
Vector3[] vmin ;
Vector3[] vop ;
Vector3[] vcl ;

//this is the horizontal line

```

```

    Transform lineH;

    //these are the variables used to change the size of the render of the
    chart
    float tf_FactorA;
    float tf_FactorB;
    float a;
    float b;

    // colors for the markers
    public Color colUP, colDOWN;

    //fork
    public float fork = 1;

    //variables for trading
    Text buy_txt, sell_txt;
    Button buy_but, sell_but, close_but;

    // selling and buying values
    float set_buy=0;
    float set_sel=0;
    float y_buy, y_sell;

    //this is the trading state
    // 0--> none, 1-->buy 2-->sell
    public int tradingState=0;

    // line horizontal for trading
    public GameObject tradingLine;

    //volume value
    InputField input_Volume_txt;
    int val_volume;
}

```

```

public class OverLine : MonoBehaviour
{
    // Start is called before the first frame update
    Transform lineTF;

    void Start()
    {
        lineTF = GameObject.FindGameObjectWithTag("positioningLine").transform;
    }

    // Update is called once per frame
    public void onEnter()
    {
        lineTF.transform.localPosition = new
        Vector3(transform.localPosition[0],0,0);

        //set the text and images to true
        transform.GetChild(0).GetComponent<Image>().enabled = true;
        transform.GetChild(1).GetComponent<Image>().enabled = true;
    }
}

```

```
        transform.GetChild(2).GetComponent<Text>().enabled = true;
        transform.GetChild(3).GetComponent<Text>().enabled = true;
        transform.SetAsLastSibling();
    }

    public void onExit()
    {
        //set the text and images to false
        transform.GetChild(0).GetComponent<Image>().enabled = false;
        transform.GetChild(1).GetComponent<Image>().enabled = false;
        transform.GetChild(2).GetComponent<Text>().enabled = false;
        transform.GetChild(3).GetComponent<Text>().enabled = false;
    }
}
```

## 5. Video tutorials

We have a video tutorial explaining how package mechanics works.

<https://youtu.be/76A5bPuFsno>

We also comment the scripts in this video tutorial.

<https://youtu.be/tfQPfCtAdkQ>

## 6. Exporting to android

Please notice that the pointer enter and exit event work differently in Android.