

**Facultatea Calculatoare, Informatica  
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Medii Interactive de Dezvoltare a  
Produselor Soft  
Lucrarea de laborator Nr.4

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**Dezvoltarea unei aplicatii mobile**

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# Lucrarea de laborator #4

## 1 Scopul lucrarii de laborator :

Realizarea aplicatiei pe **Android**

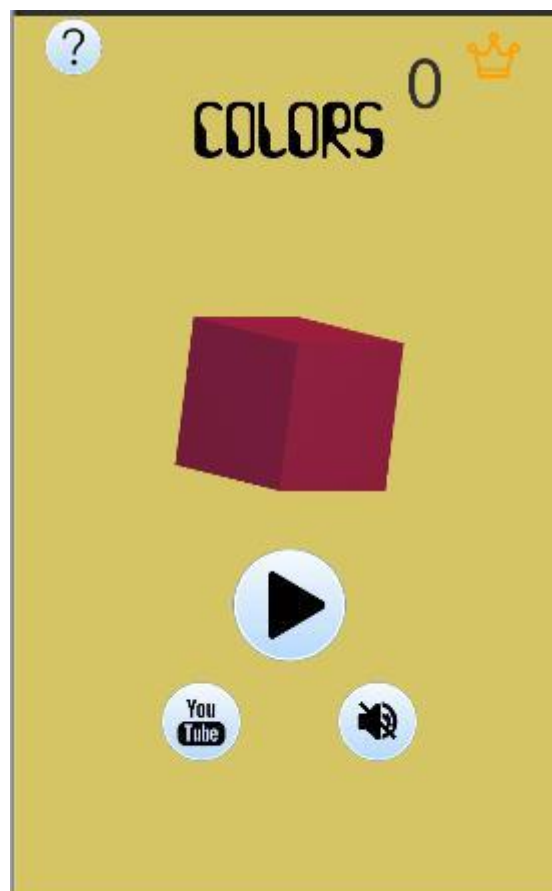
## 2 Obiectivele lucrarii :

- Cunostinte de baza privind arhitectura unei aplicatii mobile
- Cunostinte de baza ale platformei SDK

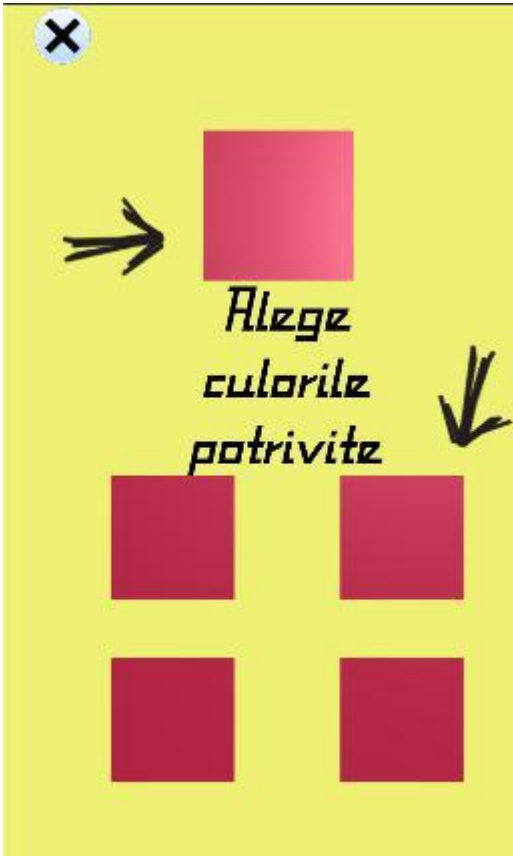
## 3 Mersul lucrarii :

Drept IDE am folosit Unity. Ca limbaj de programare a fost folosit C#. Are mai mult scene si urmatoarea structura.

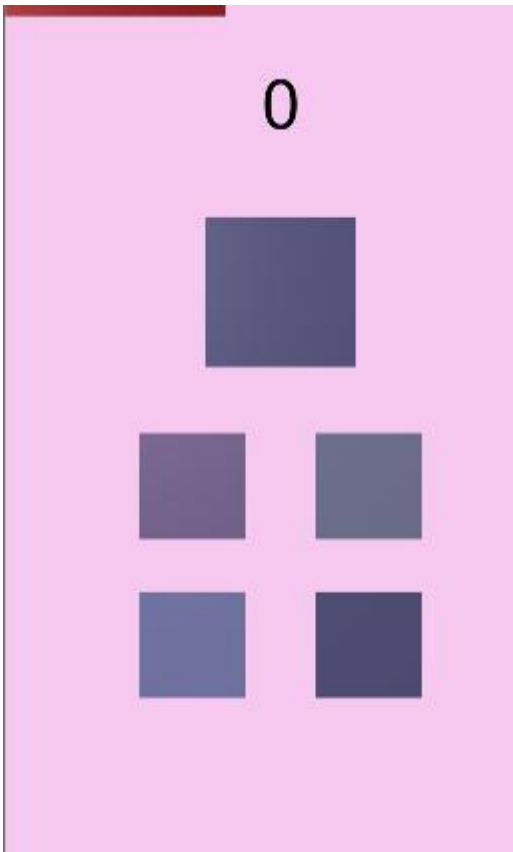
**Scena main :**



Scena How To :



Scena play :



## Screenshoturi din procesul crearii:

```
if (PlayerPrefs.GetString("Music") != "no")
    GetComponent().Play();
count++;
score.text = count.ToString();
aColor = new Vector4(Random.Range(0.1f, 1f), Random.Range(0.1f, 1f), Random.Range(0.1f, 1f), 1);
GetComponent<Renderer>().material.color = aColor;
next = false;

if (count < 3)
{
    rCol = 0.2f;
    gCol = 0.2f;
    bCol = 0.2f;
}
else if (count >= 3 && count < 5)
{
    rCol = 0.1f;
    gCol = 0.1f;
    bCol = 0f;
}
else if (count >= 5)
{
    rCol = 0f;
    gCol = 0f;
    bCol = 0.05f;
}

// New colors for blocks
rand = Random.Range(0, positions.Length);
for (int i = 0; i < positions.Length; i++)
{
    if (i == rand)
        blocks[i].GetComponent<Renderer>().material.color = aColor;
    else
    {
        float r = aColor.r + Random.Range(0.1f, rCol) > 1f ? 1f : aColor.r + Random.Range(0.1f, rCol);
        float g = aColor.g + Random.Range(0.1f, gCol) > 1f ? 1f : aColor.g + Random.Range(0.1f, gCol);
        float b = aColor.b + Random.Range(0.1f, bCol) > 1f ? 1f : aColor.b + Random.Range(0.1f, bCol);
        blocks[i].GetComponent<Renderer>().material.color = new Vector4(r, g, b, aColor.a);
    }
}
```

```
void playerLose()
{
    if (PlayerPrefs.GetInt("Score") < count)
        PlayerPrefs.SetInt("Score", count);
    plost.SetActive(true);
    if (PlayerPrefs.GetString("Music") == "no")
        plost.GetComponent<AudioSource>().mute = true;
}
```

## Concluzie :

In lucrarea data s-a creat o aplicatie mobila pe Android. Insi aplicatia reprezinta o joaca simpla (Colors). Joaca suporta doar un singur regim. Dupa fiecare joc cistigat – jucatorul acumuleaza puncte. Ca IDE s-a folosit **Unity** si **Visual Studio**. Au fost adaugate butoane de resetare a jocului. In urma efectuarii lucrarii am acumulat multa experienta pe mobile , totodata am studiat mai profund **Unity** si am invatat limbajul **C#**