

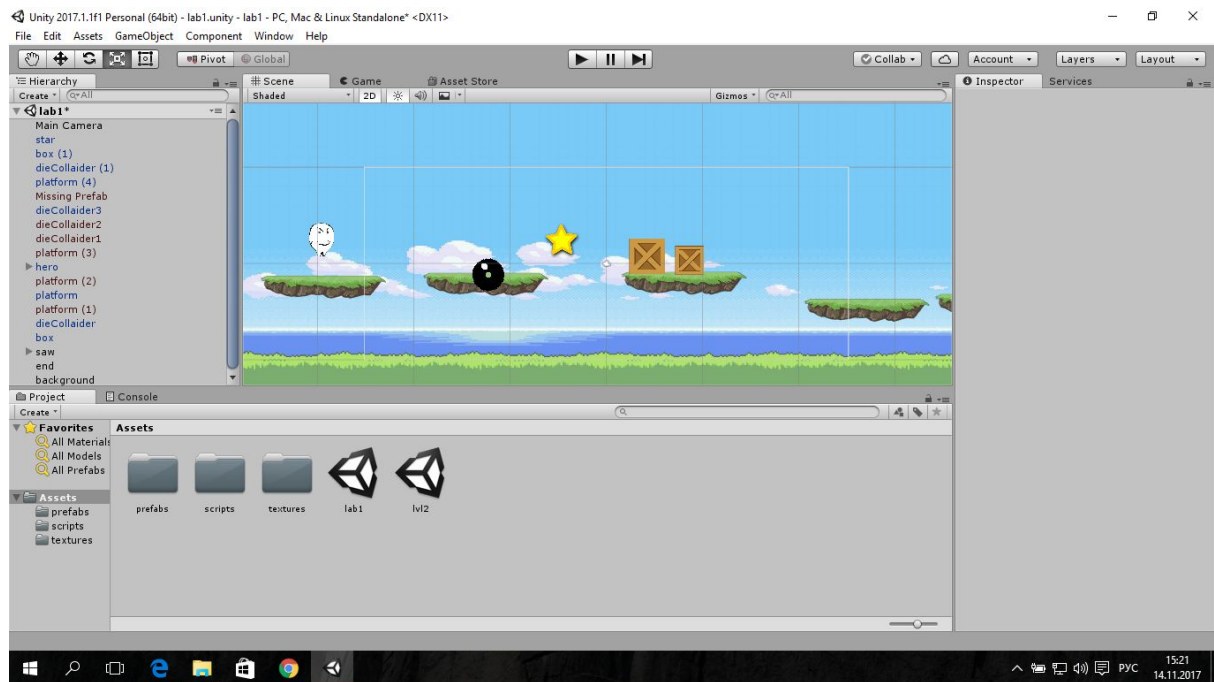
МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ  
ОДЕСЬКА НАЦІОНАЛЬНА АКАДЕМІЯ ХАРЧОВИХ ТЕХНОЛОГІЙ  
ІНСТИТУТ ХОЛОДУ, КРІОТЕХНОЛОГІЙ ТА ЕКОЕНЕРГЕТИКИ

**Лабораторна робота №1**  
**з дисципліни:**  
**«Проектування ігрових систем»**

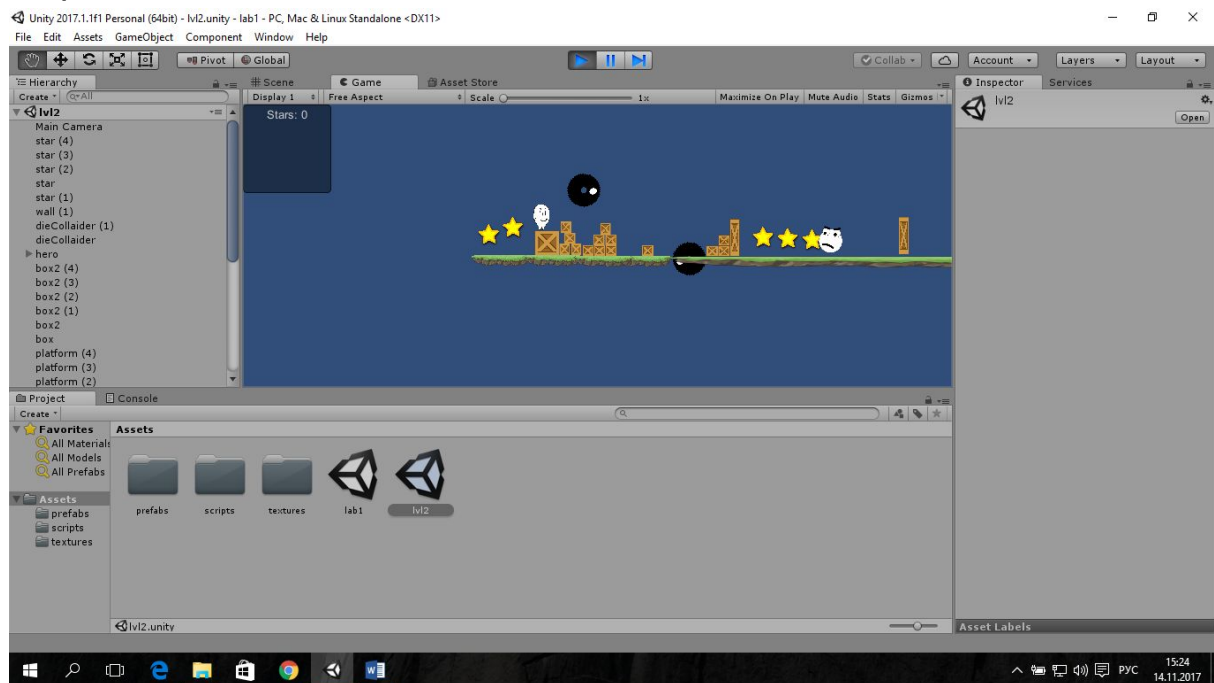
студента гр. 542  
Погосяна Михайла.  
Викладач:  
Сіренко О. І.

2017 р.

# 1 Уровень



# 2 Уровень



Скрипты:

Персонажа

```
using UnityEngine;
```

```
using System.Collections;
```

```
public class charactercontroller : MonoBehaviour {
```

```
    public float maxSpeed = 10f;
```

```
    public float score = 0f;
```

```
    public float jumpForce = 700f;
```

```
    bool facingRight = true;
```

```
    bool grounded = false;
```

```
    public Transform groundCheck;
```

```
    public float groundRadius = 0.2f;
```

```
    public LayerMask whatIsGround;
```

```
    public float move;
```

```
// Use this for initialization
```

```
void Start () {
```

```
}
```

```
// Update is called once per frame
```

```
void FixedUpdate () {
```

```
    grounded = Physics2D.OverlapCircle (groundCheck.position, groundRadius,  
whatIsGround);
```

```
    move = Input.GetAxis ("Horizontal");
```

```
}
```

```
void Update(){
```

```
    if (grounded && (Input.GetKeyDown (KeyCode.W)||Input.GetKeyDown  
(KeyCode.UpArrow))) {
```

```
        GetComponent<Rigidbody2D>().AddForce (new Vector2(0.5f,jumpForce));
```

```
    }
```

```
    GetComponent<Rigidbody2D>().velocity = new Vector2 (move * maxSpeed,  
GetComponent<Rigidbody2D>().velocity.y);
```

```
    if (move > 0 && !facingRight)
```

```
        Flip ();
```

```
    else if (move < 0 && facingRight)
```

```
        Flip ();
```

```

    if (Input.GetKey(KeyCode.Escape))
    {
        Application.Quit();
    }

    if (Input.GetKey(KeyCode.R))
    {
        // Application.LoadLevel(Application.LoadedLevel);
    }

}

void OnGUI(){
    GUI.Box (new Rect (0, 0, 100, 100), "Stars: " + score);
}

void Flip(){
    facingRight = !facingRight;
    Vector3 theScale = transform.localScale;
    theScale.x *= -1;
    transform.localScale = theScale;
}

void OnCollisionEnter2D(Collision2D col){

    if (col.gameObject.tag == "Enemy")
        Application.LoadLevel (Application.loadedLevel);

}

void OnTriggerEnter2D(Collider2D col){
    if (col.gameObject.name == "dieCollider")
        Application.LoadLevel (Application.loadedLevel);

    if (col.gameObject.tag == "star") {
        score++;
        Destroy (col.gameObject);
    }

}

}

```

## Bpara:

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;

```

```

public class walkingEnemyScript : MonoBehaviour {
    public float speed = 7f;
    float direction = -3f;
    float velocity = 10f;
    // Use this for initialization
    void Start () {

    }
    // Update is called once per frame
    void Update () {
        GetComponent<Rigidbody2D>().velocity = new Vector2 ( speed * direction,
        GetComponent<Rigidbody2D>().velocity.y);
        transform.localScale = new Vector3 (direction, 3, 3);
    }
    void OnCollisionEnter2D(Collision2D col){
        if (col.gameObject.tag == "Wall")
            direction *= -1f;
    }
}

```

## Триггер смерти

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class dieScript : MonoBehaviour {

    void OnTriggerEnter2D(Collider2D col){
        if (col.gameObject.name == "hero")
            Application.LoadLevel (Application.loadedLevel);
    }
}

```

## Привязка камеры

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class dieScript : MonoBehaviour {

    void OnTriggerEnter2D(Collider2D col){

```

```

        if (col.gameObject.name == "hero")
            Application.LoadLevel (Application.loadedLevel);
    }

}

```

## Враг пила

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class sawScript : MonoBehaviour {

    // Use this for initialization
    void Start () {
    }
    // Update is called once per frame
    void Update () {
        transform.Rotate (new Vector3(0f,0f,-3f));
    }
    void OnTriggerEnter2D(Collider2D col){
        if (col.gameObject.name == "hero")
            Application.LoadLevel (Application.loadedLevel);
    }
}

```

## Конец уровня

```

using System.Collections;
using System.Collections.Generic;
using UnityEngine;

public class endScript : MonoBehaviour {

    // Use this for initialization
    void Start () {

    }

    // Update is called once per frame
    void Update () {}
    void OnTriggerEnter2D(Collider2D col){
        if (col.gameObject.name == "hero")
            Application.LoadLevel ("lvl2");
    }
}

```