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**Portfolio - Programista**

# MARIO 2020r.

## Unity C#

github: <https://github.com/mrskaterr/Mario>



**Pierwszy poziom Mario wykonany wyłącznie przeze mnie.**

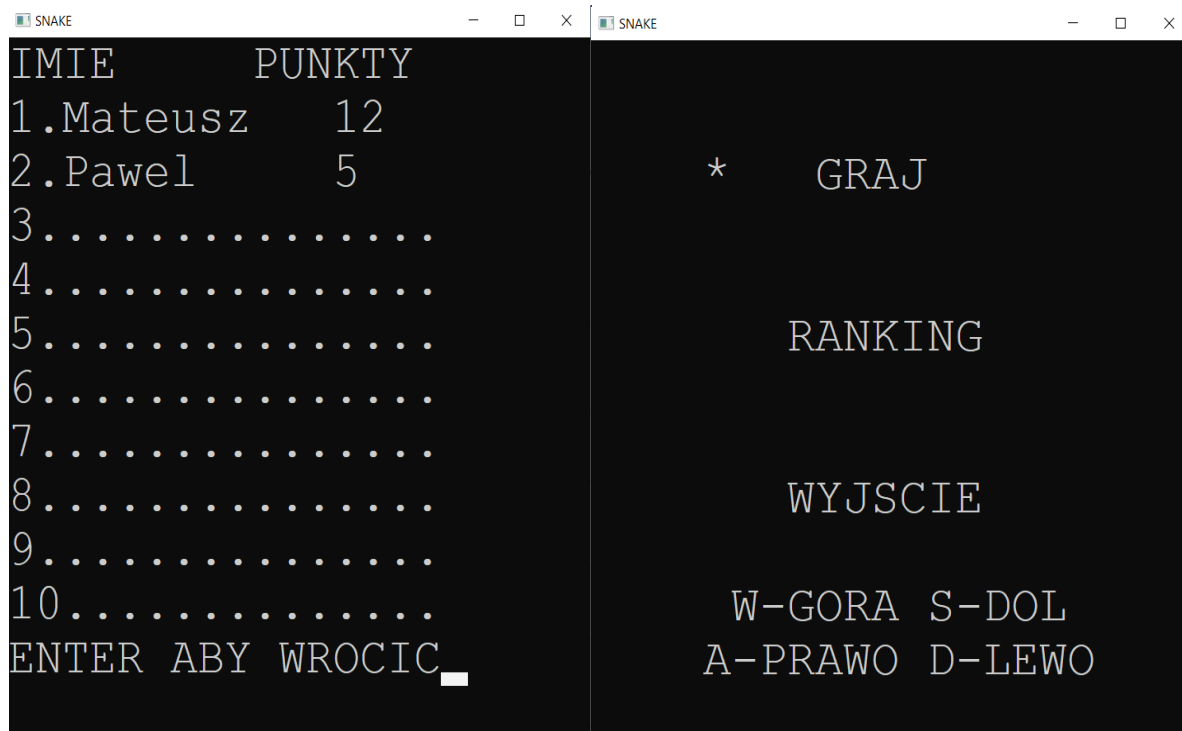
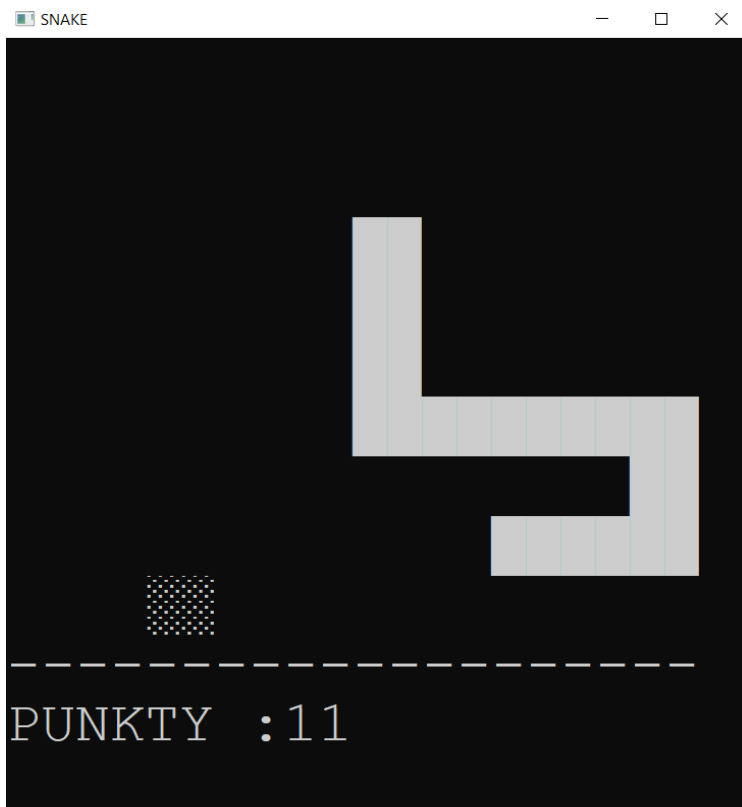
```
5 public class Turtle : MonoBehaviour
6 {
7     public float Distance;
8     public float Speed;
9     float PrivateSpeed = 0;
10    public GameObject Player;
11    public GameObject Mushroom;
12    public GameObject Canvas;
13
14    Rigidbody2D rb;
15    void Start()
16    {
17        rb = GetComponent<Rigidbody2D>();
18    }
19
20    void Update()
21    {
22        if (PrivateSpeed == 0 && (gameObject.transform.position.x - Player.transform.position.x) <= Distance) PrivateSpeed = Speed; //Run Activation
23        rb.velocity = new Vector3(PrivateSpeed, 0, 0);
24    }
25    private void OnCollisionEnter2D(Collision2D collision)
26    {
27        if (collision.gameObject == Player && collision.gameObject.GetComponent<Rigidbody2D>().velocity.y < 0) //Turtle transform to Turtle2
28        {
29            gameObject.FindGameObjectWithTag("Canvas").GetComponent<TimeScoreCoin>().AddScore(200);
30            gameObject.transform.GetChild(0).gameObject.SetActive(false);
31            gameObject.transform.GetChild(1).gameObject.SetActive(true);
32            if (collision.gameObject.transform.position.x > gameObject.transform.position.x) gameObject.GetComponent<Turtle>().PrivateSpeed = Mathf.Abs(PrivateSpeed)*1.5f; //RIGHT
33            if (collision.gameObject.transform.position.x < gameObject.transform.position.x) gameObject.GetComponent<Turtle>().PrivateSpeed = -Mathf.Abs(PrivateSpeed)*1.5f; //LEFT
34        }
35        else if (collision.gameObject == Player && collision.gameObject.transform.localScale.x > 1)
36        {
37            collision.gameObject.GetComponent<Movement>().Jump2();
38            collision.gameObject.transform.localScale = new Vector3(1, 1, 1);
39        }
40        else if (collision.gameObject == Player) //Player DIE
41        {
42            collision.gameObject.GetComponent<PlayerDead>().enabled = true;
43        }
44        else if (collision.gameObject == Mushroom && PrivateSpeed != Speed) //Mushroom Die
45        {
46            collision.gameObject.SetActive(false);
47            Canvas.GetComponent<TimeScoreCoin>().AddScore(200);
48        }
49        else if (rb.velocity.x == 0) PrivateSpeed *= -1; //Change
50    }
51 }
52
53
54
55
```

**Najtrudniejszym zadaniem było stworzenie movementu dla żółwia. Żółw mógł Cię zaatakować lecz gdy dobrze się na niego skoczy, unieszkodliwia się go i można posługiwać się nim jak piłką do gry oraz atakować inne potwory.**

# Snake 2020r.

Został wykonany w terminalu bez silnika - 272 linijki

github: <https://github.com/mrskaterr/Snake>



```

142 Snake* turnAndBuild(char turn, Snake* start) {
143     Snake* Help = new Snake;
144     if (turn == 'w' || turn == 'W') {
145         if (HeadX == 0) HeadX = Size - 1;
146         else HeadX--;
147     }
148     else if (turn == 's' || turn == 'S') {
149         if (HeadX == Size - 1) HeadX = 0;
150         else HeadX++;
151     }
152     else if (turn == 'd' || turn == 'D') {
153         if (HeadY == Size - 1) HeadY = 0;
154         else HeadY++;
155     }
156     else if (turn == 'a' || turn == 'A') {
157         if (HeadY == 0) HeadY = Size - 1;
158         else HeadY--;
159     }
160
161     if ((* (Space + HeadX) + HeadY) == Point) {
162         Score++;
163         (* (Space + HeadX) + HeadY) = Body;
164         Help->BodyPart = (* (Space + HeadX) + HeadY);
165         Help->Next = start;
166         return Help;
167     }
168     else if (Score == 0) {
169         Help->BodyPart = (* (Space + HeadX) + HeadY);
170         (* (Space + HeadX) + HeadY) = Body;
171         Help->Next = NULL;
172         (* (start).BodyPart) = Blank;
173         start = NULL;
174         return Help;
175     }
176     else if ((* (Space + HeadX) + HeadY) == Blank) {
177         Snake* help2 = new Snake;
178         Help->BodyPart = (* (Space + HeadX) + HeadY);
179         (* (Space + HeadX) + HeadY) = Body;
180         Help->Next = start;
181         help2 = start;
182         for (int i = 0; i < Score; i++) {
183             start = help2;
184             if (help2 == NULL) {
185                 SaveScore();
186                 Ranking();
187             }
188             help2 = help2->Next;
189             if (help2->Next == NULL) {
190                 (* (help2).BodyPart) = Blank;
191                 help2 = NULL;
192                 start->Next = NULL;
193                 return Help;
194             }
195         }
196     }
197     return NULL;

```

Nad tą częścią kodu przesiedziałem najwięcej czasu. Jest on odpowiedzialny za poruszanie się węża, wydłużanie się go oraz zdobywanie punktów.