**SPRAWOZDANIE**

Zajęcia: Grafika komputerowa

Prowadzący: prof. dr hab. Vasyl Martsenyuk

**Laboratorium 9**

**Data: 10.05.2022**

**Temat: "Konstruowanie obiektów z użyciem Three.js"**

**Wariant: 10**

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Informatyka I stopień,

stacjonarne,

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Gr. 4

1. **Polecenie:**

Celem jest konstruowanie modelu figury szachowej zgodnie z wariantem zadania (patrz rysunek) używając three.js

w oparciu na omówione na zajęcie metody konstruowania obiektów

1. **Wykorzystane komendy:**

1. kod źródłowy

var material = new THREE.MeshPhongMaterial(

    {

        color: 0xffffff,

    });

    white\_rook = new THREE.Group();

    var white\_rook\_part1 =  new THREE.Mesh(

        new THREE.SphereGeometry( 1, 32, 16, 0, Math.PI ), material);

    white\_rook\_part1.rotation.x=-8;

    white\_rook.add( white\_rook\_part1 );

    var white\_rook\_part2 =  new THREE.Mesh(

        new THREE.TorusGeometry( 1.5, 1, 16, 100 ), material);

    white\_rook\_part2.rotation.x=-8;

    white\_rook\_part2.position.y=-0.8;

    white\_rook.add( white\_rook\_part2 );

    var white\_rook\_part3 =  new THREE.Mesh(

        new THREE.CylinderGeometry( 2.5, 1.5, 3, 64 ), material);

    //white\_rook\_part3.rotation.x=-8;

    white\_rook\_part3.position.y=-2.42;

    white\_rook.add( white\_rook\_part3 );

    var white\_rook\_part4 =  new THREE.Mesh(

        new THREE.CylinderGeometry( 2.6, 2.6, 0.4, 64 ), material);

    //white\_rook\_part3.rotation.x=-8;

    white\_rook\_part4.position.y=-4;

    white\_rook.add( white\_rook\_part4 );

    var white\_rook\_part5 =  new THREE.Mesh(

        new THREE.CylinderGeometry( 3, 3, 0.4, 64 ), material);

    //white\_rook\_part3.rotation.x=-8;

    white\_rook\_part5.position.y=-4.4;

    white\_rook.add( white\_rook\_part5 );

    var white\_rook\_part6 =  new THREE.Mesh(

        new THREE.CylinderGeometry( 1.5, 2, 5, 64 ), material);

    //white\_rook\_part3.rotation.x=-8;

    white\_rook\_part6.position.y=-7.1;

    white\_rook.add( white\_rook\_part6 );

    var white\_rook\_part7 =  new THREE.Mesh(

        new THREE.CylinderGeometry( 2, 3, 5, 64 ), material);

    //white\_rook\_part3.rotation.x=-8;

    white\_rook\_part7.position.y=-12.1;

    white\_rook.add( white\_rook\_part7 );

    var white\_rook\_part8 =  new THREE.Mesh(

        new THREE.CylinderGeometry( 3, 3.8, 3, 64 ), material);

    //white\_rook\_part3.rotation.x=-8;

    white\_rook\_part8.position.y=-16.1;

    white\_rook.add( white\_rook\_part8 );

    var white\_rook\_part9 =  new THREE.Mesh(

        new THREE.CylinderGeometry( 3.8, 4.4, 2, 64 ), material);

    //white\_rook\_part3.rotation.x=-8;

    white\_rook\_part9.position.y=-18.6;

    white\_rook.add( white\_rook\_part9 );

    var white\_rook\_part10 =  new THREE.Mesh(

        new THREE.CylinderGeometry( 4.6, 4.6, 1, 64 ), material);

    //white\_rook\_part3.rotation.x=-8;

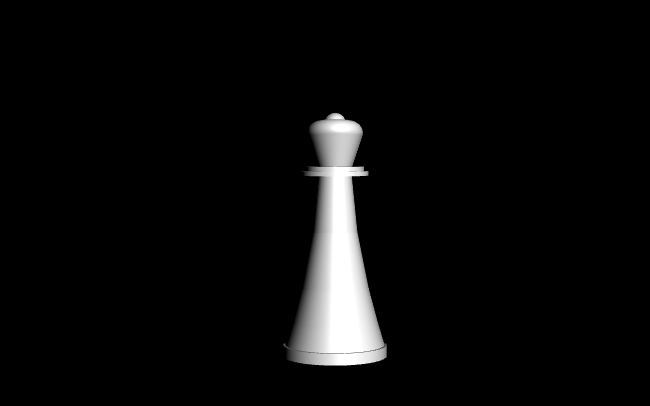
    white\_rook\_part10.position.y=-20.1;

    white\_rook.add( white\_rook\_part10 );

    scene.add(white\_rook);

<https://github.com/wielopolski/GrafikKomputerowa>

1. **Wynik działania:**



1. **Wnioski:**​

Za pomocą three.js możemy skonstruować różne obiekty w 3D.