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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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

2. Wykorzystane komendy:

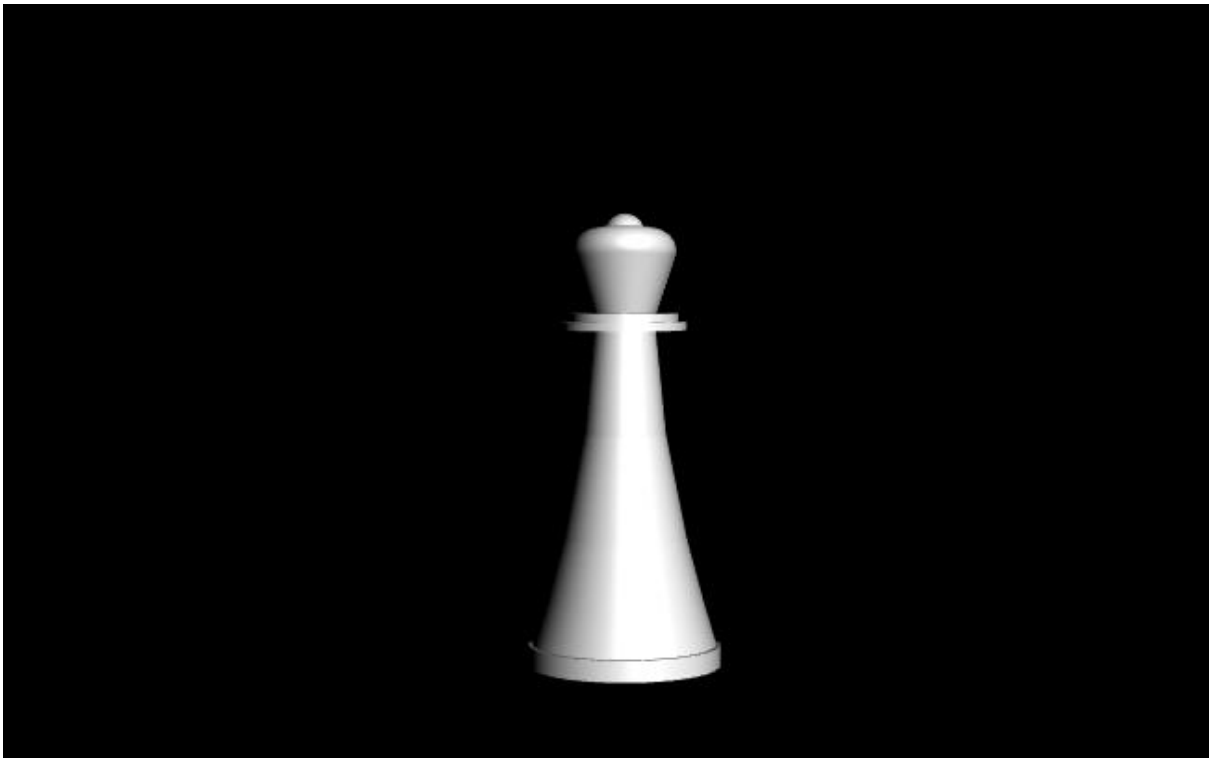
a) kod źródłowy

```
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

4. Wynik działania:



5. Wnioski:

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