Univ

TABLE OF FIGURES

GLOSSARY OF TERMS

GUI – Graphical User Interface

API – Application Programming Interface

2D – Two Dimensions

DDA –Digital differential analyzer

3D – Three Dimensions

HSB – Hue Saturation Brightness

UI – User Interface

CPU – Central Processing Unit

UML – Unig0 gld Modeling Language

positive. We will go into detail on explai

Figure 1

assumption was believed until Isaac Newton, Galileo Galilei and Rene Descartes

ich in turn is placed into the window shown

Android has a special subclass of the class View called SurfaceView which includes a dedicated raw area of the screen where drawing is handled. The SurfaceView provides a canvas object where drawings can be performed from a thread different from the main android UI thread; this enables that drawing to be performed faster and more efficiently.

1. How do we know that the object is there and that we can grab it?
2. When we pick up the object why is it going up?
3. Why is it harder to pick up bigger objects?
4. When we drop the object why does it fall?

Firstly, we Q G[( )nB100000.00000912 0 612 792 r we nBf1 vG[(e)4(0.9.82 Ta)1Tm0 gually9.82 Tsee20.917

5.1.2 The Algorithm

The algorithm that I have implemented is explained below with pseudo code on how everything fits together and the workflow, steps, iterations of the algorithm.

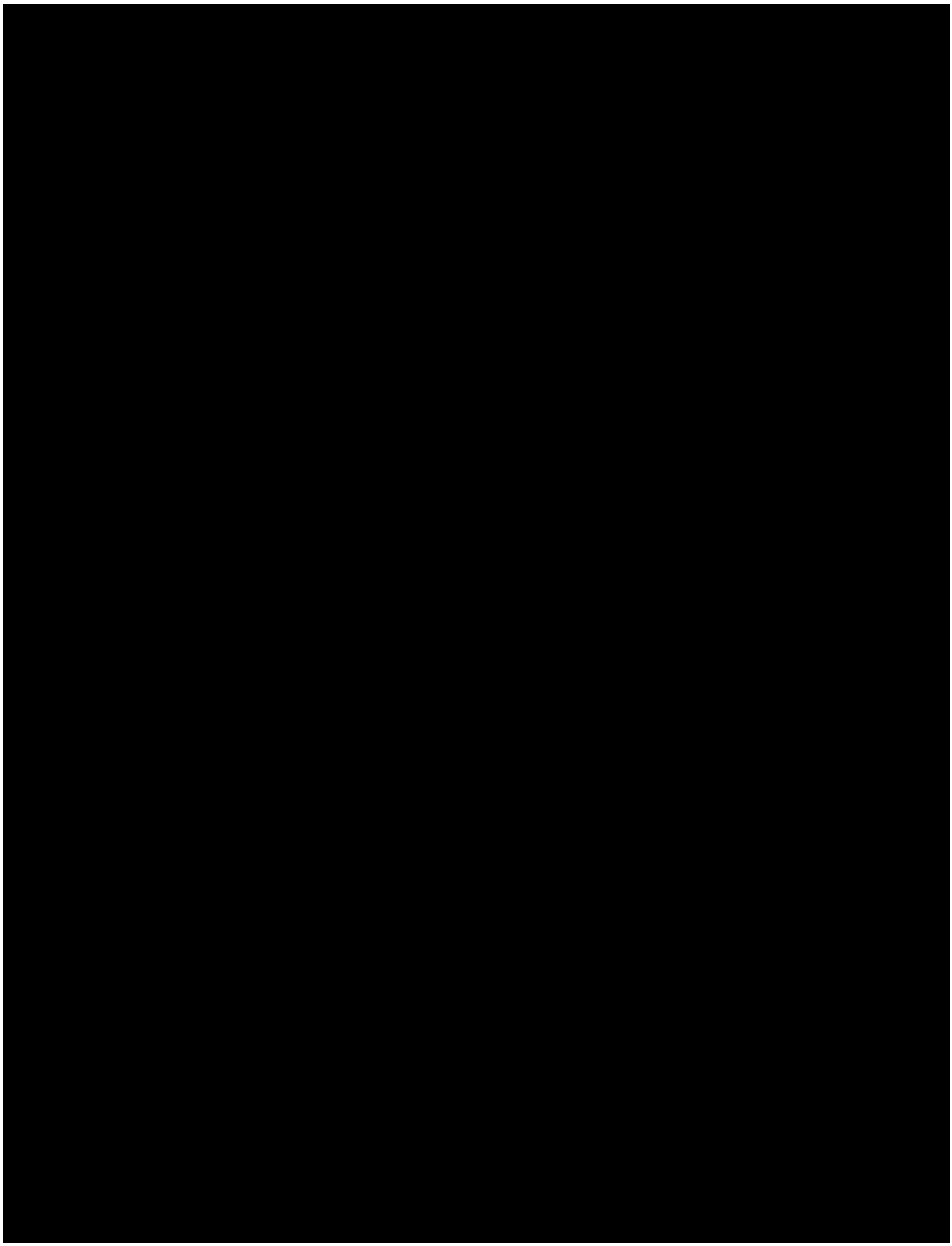

Figure 8. Algorithm flowchart

Interfaces

Math

PhysicsObject,

WorldInterface

Excepti0 0 1 0oth

- Seekbar is used to change the resolution of the electric field. When the progess of the seekbar is changed the worldssetResolution(int) method is called.
- Button pauses/starts the simulation. When this button is clicked the world startSimulation() or stopSimulation() method is called depending on which state the simulation is in.

Electric Charge is used to represent a real el4(the r)5(e)4-6(c)4(ha)4(rge)7(in t)-3(he)4(sim)-4(ulatio

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