Lab 1 - Collision Detection in 2D

Student Name(s)

Enter your name(s) here (All team members):

Name	Email	GitHub User Name
(insert name)	(insert email)	(insert github username)

Introduction

- This assignment is about collision detection in 2D.
- You will write code that finds if a finite set of primitives intersect in 2D space.

Instructions

Get started

Every student has to do the following steps:

1. Make sure you have a GitHub account.
2. Accept the assignment by following the following link:https://classroom.github.com/g/f9kGXndm.
3. Select yourself in the list of identifiers. *Make sure you select the correct one*
4. Create a new Team *OR* Select your team from the list. *Make sure you select the correct one*
5. If this is your first time. You will receive an email with an invitation to the organisation `gameprogrammingii`. Accept this invitation.

The assignment

1. Clone the repository
2. Edit the README.md (this file) and enter the name, email and username of all students in your team.
3. Complete the assignment (read the rest of this document).

Hand-in

1. Commit and Push all your changes
2. Create a new Issue in your GitHub project indicating that you are done with assignment and tag JohanNorberg

Deadline

2020-03-27

Pass Requirements

To get a *Pass* on this assignment you will have to implement collision detection between the following primitives: - Point - Circle - Line segment - Axis aligned bounding box.

Pass with Distinction Requirements

For a Pass with Distinction on this assignment you have to implement collision detection for all the above primitives in the Pass section. In addition you must include: - Object oriented bounding box and line segments.

	Point	Circle	Line Segment	Axix Aligned Bounding Box	Object Oriented Bounding Box
Point	-	Pass	-	Pass	Pass With Distinction
Circle	Pass	Pass	Pass	Pass	Pass With Distinction
Line Segment	-	Pass	Pass With Distinction	Pass With Distinction	Pass With Distinction
Axix Aligned Bounding Box	Pass	Pass	Pass With Distinction	Pass	Pass With Distinction
Object Oriented Bounding Box	Pass With Distinction	Pass With Distinction	Pass With Distinction	Pass With Distinction	Pass With Distinction

Grading

This assignment has Pass , Pass with Distinction or Fail . For a Pass , all the required features in the Pass section of this document must be implemented correctly. For a Pass with Distinction all the features for Pass must be implemented correctly in addition to all required features for Pass with Distinction . Failing the steps defined in the Requirements section and Hand-in section will lead to a Fail .

Requirements

This is a individual or group assignment. Original code written by the student(s) with C/C++. Example code and provided external code by course responsible can and should be used as a starting point for the laboratory.

Plagiarism

At university, we are continuously engaged with other people's ideas - we read about them, we discuss them in class and we write about them in our assignments. It is therefore important that we acknowledge these people in our assignments/projects/papers that we submit for marks. If we do not adhere to these basic requirements, we are making ourselves guilty of a gross violation of the academic standard. Academic

dishonesty in any form including, but not limited to plagiarism and collusion, cheating in tests, examinations and assignments, theses and research papers, is regarded as a serious offence and will be dealt with in terms of the provisions of the University's Disciplinary Rules for Students.