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Lab 1

To determine classes, I started my project by researching how Kiva robots function. After reviewing several videos and articles, I created a conceptual model to start determining the classes I was going to use. Once I had the classes ready, I began to list their attributes and behaviors.   
The main features I wanted to show were:

* The collision-detection system which uses sensors and cameras to prevent the robot from colliding with other robots or people.
* The robot always knows where it is on a grid-position system due to sensors it reads on the floor and also is able to work in the dark due to infrared lights.
* Kiva’s have rechargeable lead batteries and use a charging station to recharge.
* Cameras scan barcodes
* The Kiva’s movement capabilities

Githib Link: <https://github.com/linmongalo/Lab1>

List of classes I sketched before drawing diagram:

Diagram

Description automatically generated

UML Diagram

A picture containing graphical user interface

Description automatically generated

References:

<https://www.mwpvl.com/html/kiva_systems.html>  
<https://spectrum.ieee.org/three-engineers-hundreds-of-robots-one-warehouse>  
<https://www.youtube.com/watch?v=dLJ6gM4AQI4&ab_channel=TechSonic>