

Design Brief

PROJECT NAME	PackBot
CLIENT'S NAME	Charlotte Mecklenburg Schools
DESIGNERS	Calvin, Kevin, Kalvin, Kelvin
PROBLEM STATEMENT	Many students develop bad backs because their book bags are too heavy. The amount of materials that students need, plus the lack of time between classes, and a premium in real estate space in schools can lead to young students suffering from back pain.
DESIGN STATEMENT	The designer will plan, build and test a robot that will carry book bags to a designated location.
CONSTRAINTS	<ul style="list-style-type: none">• Must be less than 4'x4'x4'• Must weigh less than 20 pounds• Costs less than \$200.00• Completed before the school year• Carries at least 100 lbs• Runs on 12V AC battery• Able to move in a predetermined path• Sensor to avoid people
RESOURCES	Sensors 12V AC battery Mr. Smith (electrical engineer)