Team #20910
Speedsters
St. Thomas Aquinas School
Derry, NH

Design Review of the Terminator

Mechanical Design - Durability

- very strong chassis
  - so that it drives straight
- many pins used to make sure claw and brick are attached
  - won't break and make us re-assemble if it gets dropped or crashes into a model

Mechanical Design - Durability

- our robot is balanced front to back and side to side
- this makes it easy for our claw to work without tipping over
- our robot is also very light so it can drive fast

Strategy & Innovation - Design Process

- we started the season using an NXT robot, and then the school bought us an EV3 robot about a month ago
- from our NXT robot, we kept the 2 motors plus pivot wheel design
- but we wanted to use the EV3's Medium motor
- so we looked for design ideas, and saw different claws
- we eventually liked this basic claw because it does what we need it to do, in a simple way
- simple designs are good because they are easy to learn and repair when we need to.

Strategy & Innovation - Mission Strategy

- after we all built the missions and put them on the table, we all picked our favorites
- we started with the truck mission and toy factory
- then we started to group the missions together because they were near each other
- in the last week, we have spent time making sure we do the missions that are right there in base: the animals and careers
  - because they seemed easier and we should do the easy things first

Strategy & Innovation - Innovation

- our claw is our innovation
- it is one attachment that does everything we need
- we also thought about our pivot wheel as an attachment
  - high wheel to point the claw down to push
  - low wheel when we need the claw to grab a loop
- when we realized tha our robot would fit in the red Lego box, we decided to use it as our jig
  - we thought that it was a good idea to use something that was already there

Programming Review and Demo

- Can we answer any questions?