



challenge: RoboCupJunior Dance

- Design the program for a robot that can DANCE to music.
- You can also change the robot's body structure and dress it up in costume!
- Plan out the robot's behavior:
 - First, pick a song for the robot to dance to.
 - Then, decide on the choreography. It may help to get up and walk through the moves yourself.
 - Write down in your notebook (in English) the moves you want your robot to do. For example, go forward for 1 second, turn left and go forward again for 1 second.
 - Then translate your English moves into RoboLab commands. Use the RoboLab icon sheets to cut out the icons and arrange them on paper in your notebook.
 - It is very important to plan your program ahead of time, otherwise you will waste time hacking and not really thinking about what you are doing. Then you will run out of time and will not be able to finish the challenge!
 - When your dance is choreographed on paper, you can use any remaining time to modify the robot's body and make a costume for it.
- The basic rules for RoboCupJunior dance are:
 - Robots (and human team members) perform to music for up to two minutes.
 - Teams are encouraged to make their robot start a few seconds AFTER the music starts, since it is very difficult to make both the robot and the music start at exactly the same time.
 - Robots (and human team members) must stay within a marked off area on the dance stage. This will be approximately 3m by 3m. The boundaries will be marked off with black tape, surrounded by red tape.
 - Performances are scored by a panel of judges in the following categories: (1) robot design and construction, (2) sensors and technology, (3) robot costumes and props, (4) choreography and use of stage, and (5) entertainment value.