

Embedded Motion Control: Final Design

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Tutor:

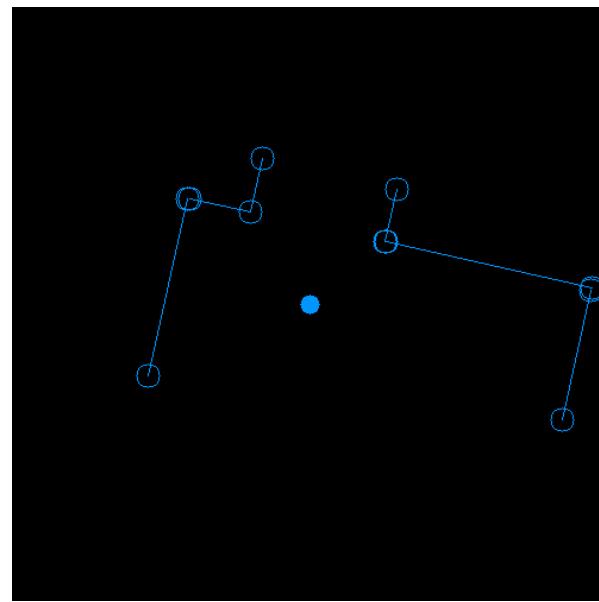
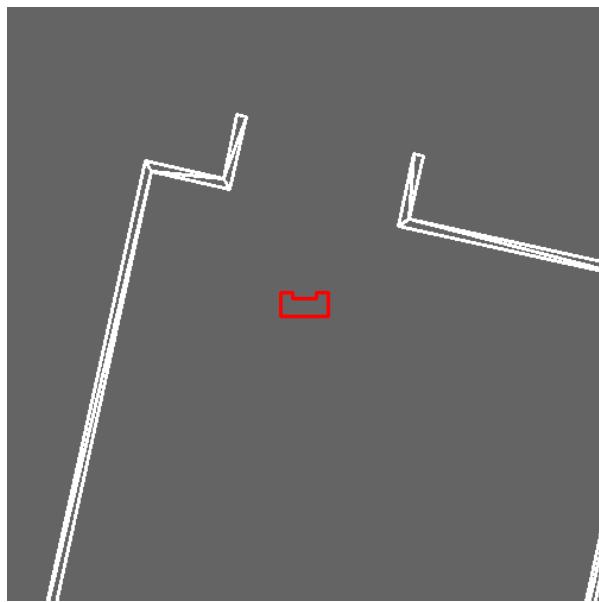
RUVU



Architecture

Making the world model:

1. Split and merge

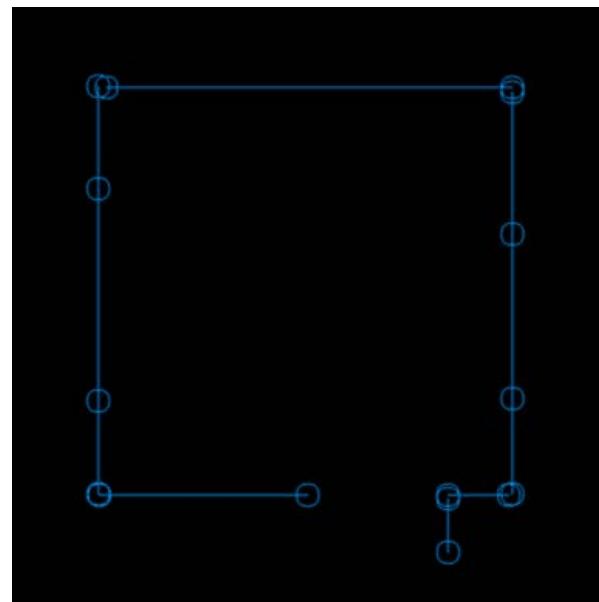
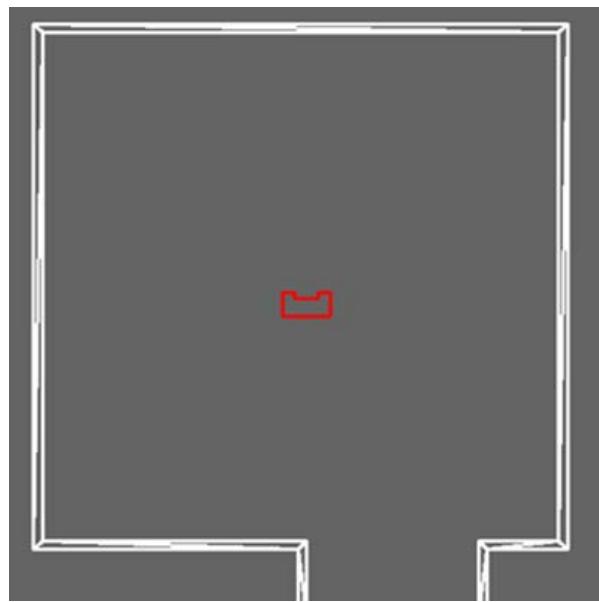


Architecture – What's next?

Architecture

Making the world model:

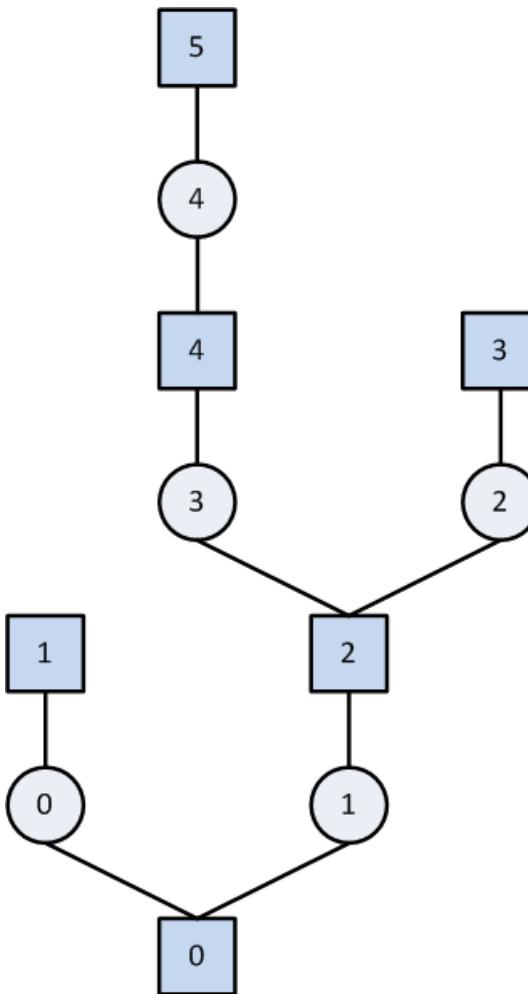
1. Split and merge
2. Fit room



Architecture

Making the world model:

1. Split and merge
2. Fit room
3. Make graph



Architecture

Making the world model:

1. Split and merge
2. Fit room
3. Make graph
4. Save graph



Architecture – What's next?

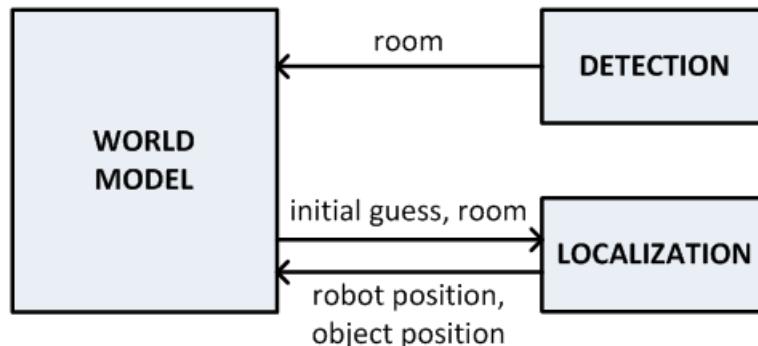
Architecture

Localization:

- Line filtering
- Localization w.r.t. room

Detection:

- Using data from PICO
- Split and merge
- Fit room



Architecture – What's next?

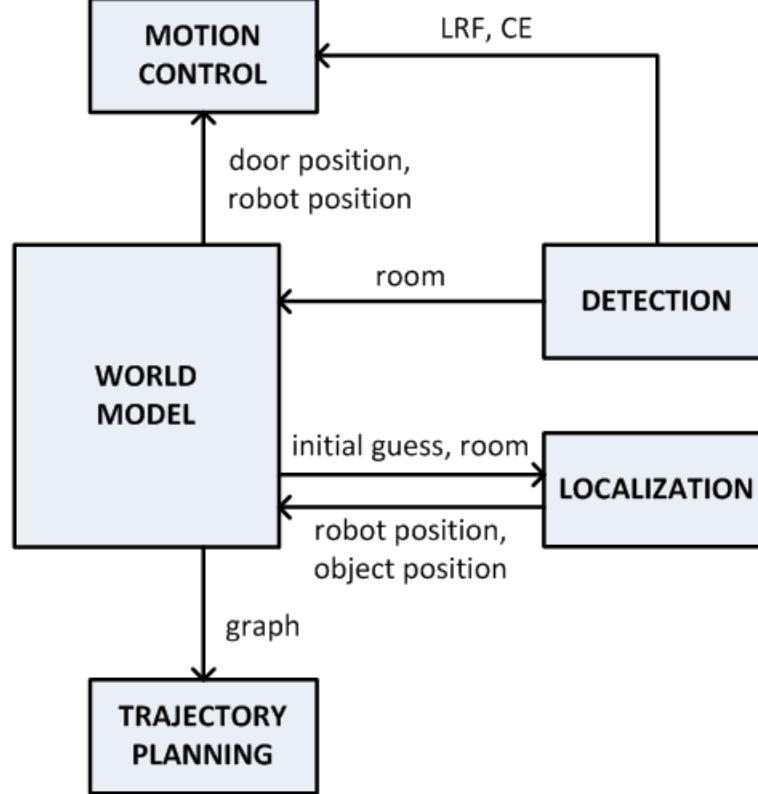
Architecture

Motion control:

- Force field
- Proportional controller

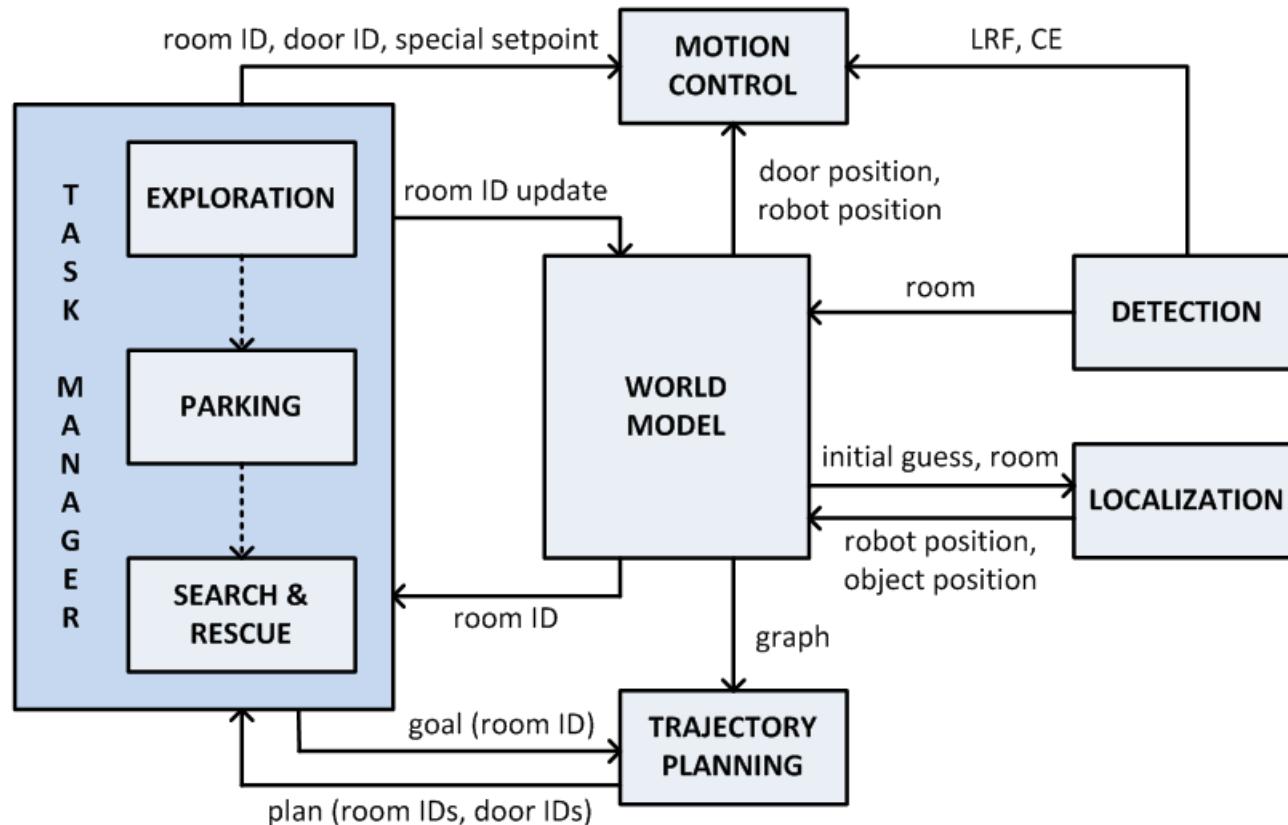
Trajectory planning:

- Planning path using graph



Architecture – What's next?

Architecture



What's next?

To-do list for the upcoming week:

- Implementing high-level hint
- Task manager
- Find object



Any questions?