CS684: Embedded System Course

Rulebook: [1] Theme Description

- Figure 1 shows the arena design for this theme.

- The arena is an abstraction of a parking area made up of black lines with **START** position marked.
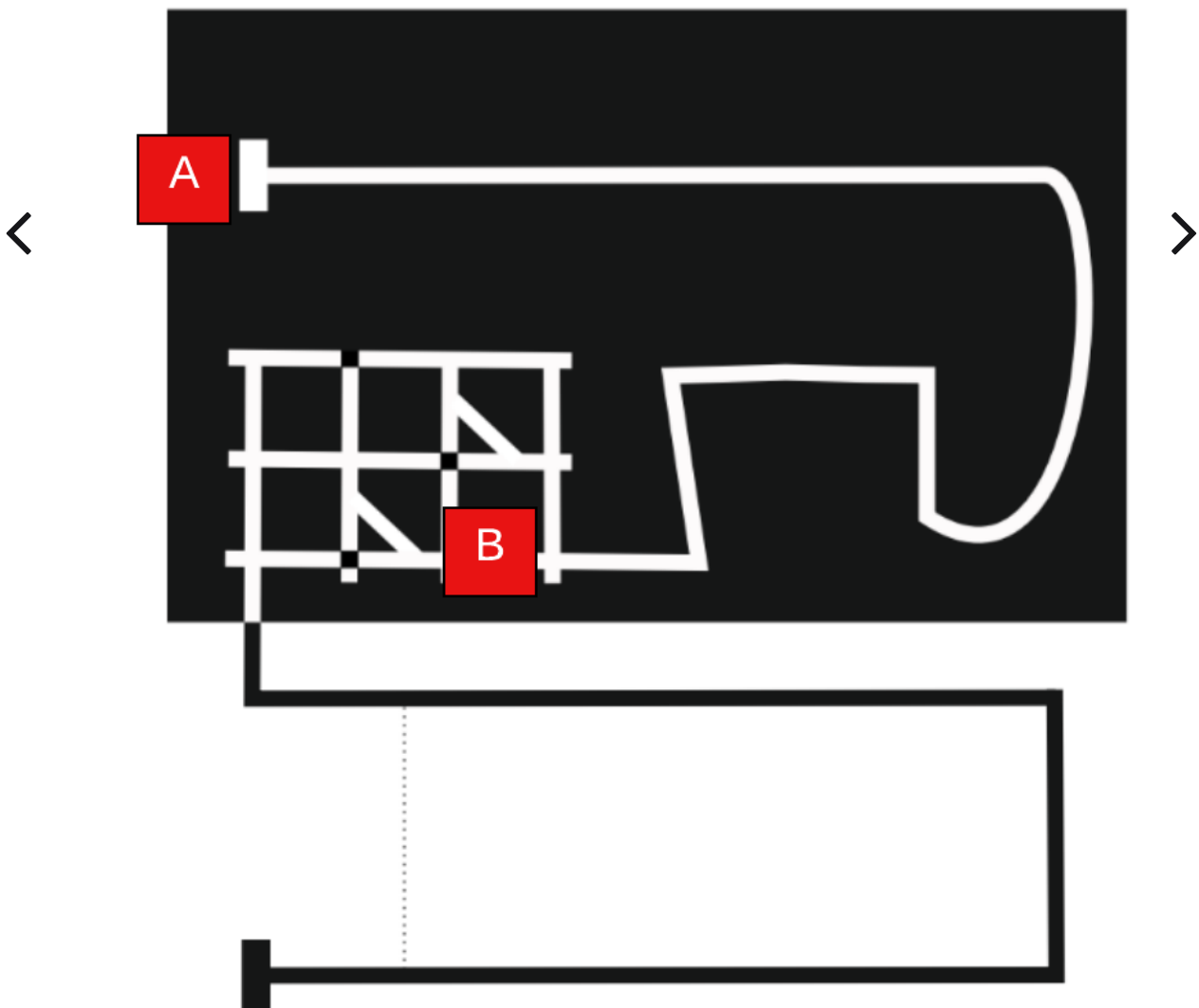

Figure 1: Arena design

1. Arena Components

- Arena consists of two parts - traversal area and parking area.
- Thermocol cubes are used to depict the dummy cars.
- Dummy cars can be placed on the line or in the parking area and will act as an obstacle. Robot has to avoid the obstacle and bypass it.

2. Theme Run Sequence

- The robot will start from the **START** position of the arena.
- It must traverse around the arena avoiding obstacles.
- It has to detect the parking area.
- Once robot enters into the parking area, it has to detect sufficient space to park itself.
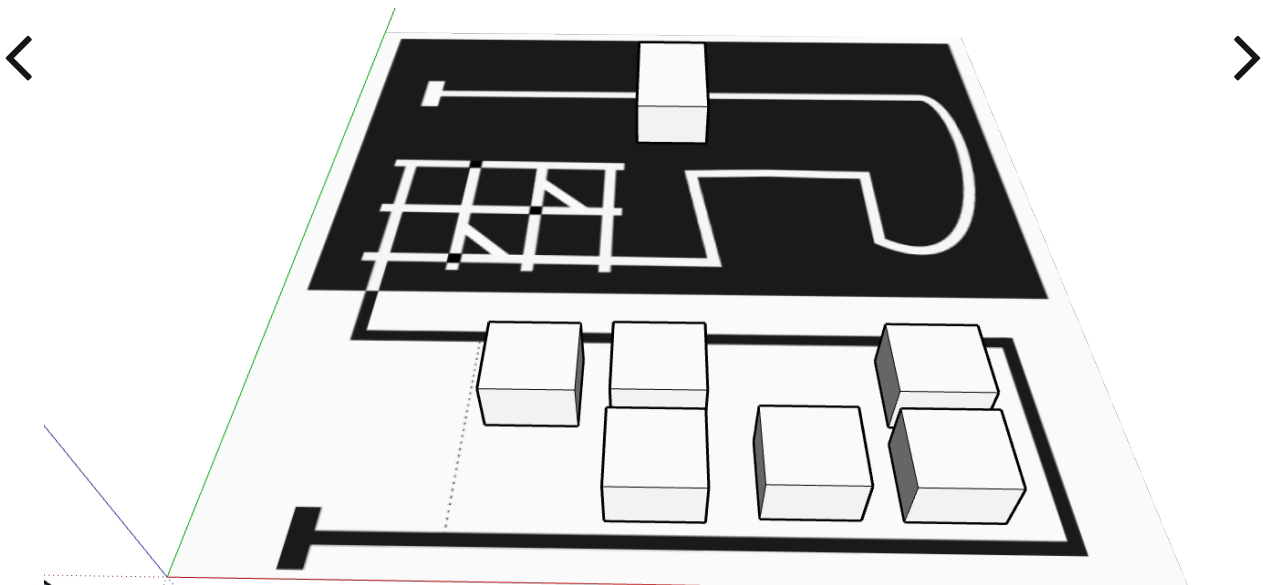- If space is not available for the parking, robot should stop at the **EXIT** position marked on the arena.

Figure 1: Arena with dummy cars