

CORE:

1. Understand A* Path Finding tutorial:
 - a. Youtube: <https://www.youtube.com/watch?v=JtiKOD0eI4A>
 - b. My code: <https://github.com/nabeelbaghoor/AIProject>
2. Change this code to support RTA* by simply replacing the algorithm function's A* code with to RTA* code.
3. Set accordingly and make it work as before!!
4. Add moving obstacles functionality by:
 - a. Replacing add "static obstacle" code to "dynamic obstacle" code.
 - b. Setting things up so that a set of random tiles are assigned to each moving obstacle whenever a user adds a new obstacle. [user won't be able to assign tiles for obstacle, he can specify the location for it though as he clicks!]
 - c. Set boundary problems such that the moving obstacles don't hit or go in walls!
 - d. [let some static obstacle code reside to be used in BONUS reqs]
 - e. [user clicks to add obstacle functionality already implemented - as part of BONUS part]
5. Make robot and obstacle animations and user input easier to understand and use!

BONUS:

1. **[Easy user interaction] simply add UI buttons or anything for making things easy to do for users, etc.**
2. **[Switch button for static/dynamic] first, the user should be able to place both types of obstacles(static/dynamic) and can choose type by this switch button.**
3. **[Beautify things up] by just changing grid style, robot sprite, robot animation, obstacle sprite, boundaries, path representation, source/destination representations, etc.**
4. **[Implement an actual robot] with RTA* [EASY] which can work with moving obstacles as well if placed!! [So, it is as easy as it was before for A* algorithm]**