1. System overview
   1. System components / prerequisites
   2. Robot structure
   3. Software structure
2. Setup and preparation
   1. *Setting up the robot software*
   2. Setting up the robot hardware
   3. Setting up the app
   4. Working environment?
3. Using the RoboTour
   1. Preparation
   2. Starting the tour (Single User)
   3. Starting the tour (Multi User)
   4. Following a tour
   5. Interactions during the tour
   6. Application features
      1. Possible speech commands??
   7. Emergency stopping the robot
4. Nominal operation (i.e. features)
   1. Route planning
   2. Line following
   3. Pointing ???
   4. Obstacle avoidance
5. Troubleshooting

THINGS TO COVER:

1. What you have - short intro to what the aim is
   1. What specific things you are given. This should also establish nomenclature we are using, e.g. Brick,, app EV3, Sensor Hub etc
   2. Describe how it is built and what is where
   3. Describe what software bits there are and what they are responsible for
2. What to do before the system can be used
   1. Turning on, connecting to a computer, setting up tethering, uploading files
   2. Sensor alignment, pointer attachment
   3. Downloading and installing the app (anything else - server?)
   4. What the environment is expected to be - white lines. Cross sections, markers, where paintings are, starting location, diagram of the map the robot uses
3. How to use it
   1. What to do each time??
   2. Run the program, make a tour, select paintings, fire up
   3. As above but for two users (i don’t know how it works)
   4. Assume a. Or b. Has been done, do some other stuff (I dunno)
   5. Describe what is possible as the tour is in progress (change speed, stop, toilet, etc). **Mention that you have to hit continue**
   6. Describe the meta-functions of the app - language selection, search, recommendations, speech processing etc
      1. A list of keywords?
   7. Press and hold the back button
4. What it should do - I think it is basically a description of what we consider nominal and correct behaviour. Perhaps made as a “story” of what the robot is doing
   1. Robot calculates route after the tour starts
   2. Robot follows line and detects branches, navigates accordingly
   3. On arrival, robot stops, points to painting, description plays to all users. Waits until continue is hit
   4. Robot detects the obstacle (how?), tries to avoid or stops (when?). Avoids by following the shape of the obstacle until it hits line again. If at junction, hits black. What happens then. What are the limitations of the obstacles (min size, has to touch the ground. Cannot have holes, where can be placed)
5. What to do if it doesn’t - we have it covered already, I think