VAMR Mini Project

## Workflow schedule

1. **Initialization module**
   1. Select two frames
      1. HINT: need large baseline, not adjacent frames, not too distant frames (suggest. 1 and 3 for KITTI dataset)
   2. Keypoint correspondences
      1. Select between patch matching (ex 3) or KLT (ex 8)
      2. Implement selected method
   3. Relative pose estimation + Triangulation (ex 6) of 3D landmarks
      1. Implement pose estimation
      2. Implement triangulation
   4. RANSAC (ex 7) filtering of the keypoint correspondences
      1. Implement RANSAC
      2. HINT: can use robust eight-point algorithm with RANSAC
   5. Initialization of cont. VO with inliers (from RANSAC filtering) and associated landmarks
2. **Continuous VO module**
   1. Associate keypoints to previously triangulated landmarks
      1. RANSAC localization (ex 7)
      2. HINT: Markov way (we only care about the previous frame)
   2. Estimate current camera pose
      1. Using RANSAC (ex 7)
      2. HINT: P3P best guess is often better that the DLT solution
   3. Triangulate new landmarks regularly (the ones that have not yet been associated with landmarks)