Keyframe-Based SLAM with Bundle Adjustment

Team: gang-of-three
Approach

Localization - 1st Thread:
- FAST + FREAK
- reprojecting map
- window matching
- Umeyama + RANSAC

->Thread communication

Mapping - 2nd Thread:
- Merge KeyFrame into map
- Calculate local map for tracking
- Bundle-Adjustment with ceres-solver
Extras

- use depth observations in cost function
- occlusion checking during pose estimation
- incorporate Pose-Pose constraints
- car parameters as user interface