## Milestone 3: Conceptual Model (90h)

* Draw the Petri Net
  + Petri net concept (Chandan, 2h)
    - Define the events and states
    - Define the assumptions with justification
    - Define the quantities to be measured
    - Define the quantities to be used as simulation results
  + Review Petri net (Arnab, Kavya, 1h per person)
  + Draw Petri net diagram electronically (Lauro, 1h)
  + Go through the milestone documentation and think about each of the questions (everyone, 1h per person)
  + Precisely define the experiments that will be performed in terms of changes in the Petri net (Arnab, Vinay, XXh)
* Prepare presentation (Chandan)

## Milestone 4: Data Analysis (90 h)

* Estimate the underlying distributions (Vinay, XXh)
  + Analyze the data from the city of Magdeburg
  + Analyze the data provided by the last year’s group
  + Analyze data collected by the group (?)
* Calculate the accuracy of the estimations
  + Chi-squared (Lauro)
  + Quantile-quantile (Chandan)
* Process and visualize data from Tomtom API (Lauro, XXh)
* Prepare presentation (Vinay)

## Milestone 5: Simulation Program (90h)

* Develop a base model from the standard-scenario Petri net(Arnab)
* Learn the traffic package on AnyLogic (Lauro, Arnab)
  + Read about integration with maps services (Anjan)
* Verify the program
  + Test the implemented functions (Chandan)
  + Verify that the output of the program is close to the real data (Anjan)
* Prepare presentation (Kavya)

## Milestone 6: Validation (90h)

* Output analysis
  + Calculate statistics on the variables of the model (Lauro)
  + Confidence intervals
  + Clarify the limitations of the program (Chandan)
* Compare simulation output data with real data
  + Update the model where it is not performing similar to the real data collected (Anjan)
* Prepare presentation (Anjan)

## Milestone 7: Experiments (120)

* Create dedicated models for each experiment (Arnab)
  + Description and justification of experiments performed (Lauro)
* Perform the experiments on the model (Anjan, Arnab)
  + Output analysis for each of the experiments
    - Analyze each experiment output and compare to vanilla data
    - Draw conclusion from the experiment result - whether it helped or not to achieve the goal
* Prepare presentation (Arnab)

## Milestone 8: Final Report (40)

* Prepare presentation (Lauro)