# Deliverables – High level

* Presentation (19th June)
  + Each person should present their contribution (3 minutes each = 15 minutes) - ALL
  + Demonstration (5 minutes)
    - Explain solution
      * Provide broad architectural diagram - Sidwell
      * Data Collection – Matsobane and Kyle
      * Data Transformation / Processing – Gareth
      * Data Visualisation - Dave
    - Explain Methodology used - Sidwell
* Supporting documentation(3rd July) - Sidwell to comment / confirm
  + Definition of ‘RUP Lite’ - Sidwell
  + Methodology Artefacts
    - Functional Specification
      * Use Case Diagram
      * Use Case Definition
    - Technical Specification
      * Architectural Diagram
      * Class / Component Diagram
* Timesheets (3rd July)
  + Individuals
  + To be combined and provided as supporting documentation
* Group Report (3rd July)– (Sidwell – define group report sections)
  + Methodology Description
  + Identification of requirements
  + List of assumptions made
    - We will have a very rudimentary algorithm to determine Pro vs Con
    - We assume that the gaps in location data is distributed equally
  + Success Criteria
    - All Graphs to visualise data collected, and transformed by TwitConPro. This excludes meta-data such as (Country/state polygons, static data such as category colours).
    - Data Visualisations
      * Daily Sentiments – Heat Map of Category by time (Hourly, Daily)
      * ConPro bar graph – Pro/Con daily stream
      * Location Based – State colour intensity per category
    - Data extracted from twitter
      * History (US Elections & SA Provincials) Dates???
      * Streamed (US Elections & SA Provincials) Dates???
  + Context with respect to relevant literature
  + Validation of final output
  + Describe possible extensions
    - Machine Learning to be more precise
    - Location Validation – We have found the data provided not be precise
    - Graphs not complete scalable
  + Risks
    - Reliability of data (Location data not valid)
    - Processing power of cluster (Computing Power)
    - Data Collection Risk (Initial)
    - Topic Ambiguity
    - Identification of Classification (Pro/Con) – Mitigation = Assumption as well as possible extension via Machine learning
      * Decided machine learning out of scope
  + References to technologies and tutorials used
* Solution (19th June)
  + Data Collection Components
    - Pretty much done, some polishing to do
  + Data Transformation Component
    - Gareth Scala/Spark Engine
    - Needs though put into algorithms
  + Data Visualisation Component
    - ~~HeatMap(50%) – Todo is make it work hourly~~
    - Country / State Maps
    - Word Cloud Map

Deadlines

|  |  |
| --- | --- |
| Presentation and solution | 19th of June |
| All other | 3rd July |

Goals:

|  |  |  |
| --- | --- | --- |
| ~~29~~~~th~~ ~~of May~~  5th of June | Dave | ~~- Finish HeatMapFinish HeatMap~~  - ~~Help Matsobane get up to speed with Node and d3~~.  - Start with Country Based Heat map  -Add US/SA Config (Topic configurations)  - Give Sidwell class diagrams |
|  | Matsobane | - ~~Up to speed with d3 and Node.js~~  - ~~Bar Graph (Pro/Cons)~~  - Give Sidwell Class diagrams |
|  | Sidwell | - To define group report sections  ~~- Define supporting docs~~ |
|  | Kyle | - Generate some algorithm for data processing  - Give Sidwell Class diagrams |
|  | Gareth | - Complete CategoryCountPerDay data feed  - ~~Give Sidwell Class diagrams~~ |

|  |  |  |
| --- | --- | --- |
| 12th of June | Dave | -Unit test with mock data and document (UI)  -Give Sidwell class diagrams  -Put this doc in trello! |
|  | Matsobane | -Send Gareth Mongo DB  -Unit test with mock data and document (Data collector)  -Give Sidwell class diagrams |
|  | Sidwell | -Create Presentation Template  -Create Group Report Template  - Create Individual Report Template |
|  | Kyle | -Algorithms for Scala  -Send Gareth Mongo DB  -Unit test with mock data and document (Data collector)  -Give Sidwell class diagrams |
|  | Gareth | -Unit test with mock data and document (Data collector)  -Give Sidwell flow diagrams(Only once finished, not due by the 12th) |

4 weeks left from the 5th of June