Lab 2 Section 3 Collaborative Outline

1. Specific Requirements
   1. Functional Requirements
      1. Databases (**Odean Maye)**
         1. Trains
         2. User Information
         3. Stops
         4. Events
         5. Attractions
         6. Historical Data
      2. Decision Engine (**Nathan Lutz**)
         1. DB Communication
         2. Ridership Trend Analysis
         3. Delay Impact Calculator
      3. Test Harness **(Akeem Edwards)**
         1. GPS Data Generation
         2. Ridership Data Control
         3. Train Control
         4. GUI
         5. Business Ad Campaign Control
      4. Web Application Engine
         1. Alert Module **(Chris Coykendall)**
         2. Feedback Module **(Chris Coykendall)**
         3. System Overview Module **(Chris Coykendall)**
         4. Google Maps Web Form **(Chris Coykendall)**
         5. Calendar Event Module **(Chris Coykendall)**
         6. Ridership Trend Report **(Brian Dunn)**
         7. Train Data Report **(Brian Dunn)**
         8. Business Ad Campaign Module **(Brian Dunn)**
         9. User Management **(CJ Deaver)**
         10. Authentication **(CJ Deaver)**
         11. Data Integration **(CJ Deaver)**
             1. DB Interface
             2. DE Interface
             3. Test Harness Interface
         12. GUI Framework **(Brian Dunn)**
             1. Rider GUI
             2. HRT GUI
             3. Business GUI
   2. Performance Requirements
      1. Database Read/Write Speed (**Odean Maye**)
      2. Web Application Engine Performance (**Chris Coykendall**)
      3. Data Validation (**Akeem Edwards**)
         1. GPS
         2. Ridership
      4. Algorithm Efficiency (**Nathan Lutz**)
         1. Trending
      5. Prototype Demonstration (**Collaborative**)
   3. Assumptions and Constraints (**Collaborative**)
      * Assumptions: Users
   4. Non-functional Requirements (**Nathan Lutz**)
      1. Authentication
      2. Maintainability
      3. Reliability
         1. VM Uptime/Redundancy