

**Labs Mode Summary for Week 3**

Below is a Labs Mode–ready summary for Week 3, integrating your checklist, documentation, and screenshots. This format is suitable for both project documentation and hiring manager review.

**Week 3: Dashboard Design & Visualization**

**3.15 Sketch Dashboard Wireframe for Tableau Public**

* **What layout decisions supported your business impact questions?**  
  Prioritized KPIs (Median Employee Growth, High-Growth Companies, Funding) at the top for executive insight. Filters (City/State, Company Age, Funding Status) on the left for segmentation. Main charts (Top 10 by Employee Growth, Growth Distribution, Growth vs. Funding) are central, with a geographic map at the bottom. Layout designed for clarity, fast scanning, and interactive exploration.
* **How did you prioritize visual hierarchy?**  
  Grouped KPIs, followed by supporting charts, then the map. Used size and position to direct user attention from summary to detail.
* **User experience considerations:**  
  Ensured all elements are clearly labeled, with explanatory legends and filters for user-driven exploration.  
  **Screenshot uploaded: dashboardwireframe.jpg**

**3.16 Identify Key Metrics and KPIs for Dashboard**

* **Which metrics directly answered stakeholder questions?**  
  See src/kpiselection.md file
* **How did you validate KPI relevance?**  
  See src/kpiselection.md file
* **What benchmarks did you establish for success measurement?**  
  See src/kpiselection.md file  
  **Screenshot uploaded: kpiselection.jpg**

**3.17 Connect Tableau Public to PostgreSQL**

* **What connection challenges did you overcome?**  
  Tableau Public does not support direct PostgreSQL connections; it only allows connections to local files (CSV, Excel) and Google Sheets.
* **Which authentication methods worked best?**  
  Not applicable; used CSV export from PostgreSQL.
* **How did you optimize data refresh performance?**  
  Used a local CSV extract for fast loading and dashboard responsiveness.  
  **Screenshot uploaded: tableauconnection.png**

**3.18 Build Visualizations (Charts, KPIs, Filters)**

* **Which chart types most effectively communicated your insights?**  
  KPI cards for core metrics, bar chart for Top 10 by Employee Growth, histogram for growth distribution, scatter plot for growth vs. funding, map for geographic patterns.
* **How did you handle data limitations in visual design?**  
  Focused on fields with high completeness, used medians to minimize outlier impact, and excluded or grouped missing data.
* **What interactivity features enhanced user understanding?**  
  Filters for city, age, and funding; tooltips for detailed drill-down in Tableau.  
  **Screenshot uploaded: tableaucharts.png**

**3.19 Combine Visuals into an Interactive Dashboard**

* **How did you ensure dashboard coherence and professional appearance?**  
  All KPIs and visuals are integrated in a single, interactive Tableau dashboard with a logical layout and clear labels.
* **What user testing informed your final design?**  
  Reviewed for clarity, logical flow, and business relevance.
* **Which performance optimizations did you implement?**  
  Used a CSV extract, limited chart complexity, and optimized layout for readability and speed.  
  **Screenshot uploaded: tableaudashboard.png**

**Summary:**  
Week 3 demonstrates your ability to design, build, and document a professional-grade Tableau dashboard using best practices for layout, interactivity, and business relevance. All steps are supported by clear screenshots and linked documentation (see src/kpiselection.md).

Let me know if you need this in a specific format (Markdown, Word, PDF), or if you’d like to proceed to Week 4!

⁂