**User Manual for Navigating the Job Market Dashboard**

**Page 1: Job Market Overview**

This feature enables users to interact with the job market dashboard efficiently. The following steps help explore job trends, required skills, and hiring companies, making the process more productive.

**Step 1: Select Filters (Left Panel)**

Customize your job search by selecting the following filters from the left panel:

* **Major:** Select your major to view relevant job opportunities.
  + *Default:* "All" (shows jobs for all majors).
* **Skill**: Choose a skill to filter jobs that require it.
  + *Example:* Select **"AWS"** to see job roles needing AWS expertise.
* **Job Title**: Pick a job title to refine your search.
  + *Example:* Select **"Software Developer"** to find jobs for that role.
* **Level**: Choose your experience level (Entry Level, Associate, Director, etc.).
  + *Default:* "All" (includes jobs at all levels).

**Step 2: Analyze Job Market Trends**

After applying filters, the dashboard updates dynamically. Use the visual elements to analyze trends:

* **Job Count (Gauge Chart - Top Left)**
  + Displays the total number of available jobs based on selected filters.
  + The range adjusts dynamically as filters change.
* **Required Skills by Job Title & Level (Bar Chart - Top Center)**
* Shows a breakdown of required skills for different job roles.
* Job levels (Entry Level, Associate, Director, etc.) are color-coded.
* This will help to identify key skills needed for career growth.
* **Hiring Companies (Bar Chart - Top Right)**
* Highlights companies with the most job postings.
* Helps users target specific employers.
* **Job Titles & Skills Overview (Tree map - Bottom)**
* Displays job titles along with their required skills
* Each colored block represents a combination of job title and skill.
* This will help to identify in-demand skills for different roles.

These visual elements will help users identify the skills required for specific job titles, the companies hiring for those positions, and how job titles align with required expertise. It provides insight into which skills are in demand for roles and highlights the company hiring for those roles.

**Page 2: GGC Majors and Skills Breakdown**

This page displays the IT majors offered at Georgia Gwinnett College (GGC), along with their associated courses. It features several Key elements:

* **Major Panel**: Shows GGC's available IT majors, allowing users to explore relevant courses for each major.
* **Skills Breakdown (Decomposition Tree)**:
* **Category**: Displays the general category of IT major for example Data science and analytics, software development, enterprise system, system and security and digital media.
* **Courses**: Lists the courses within each category.
* **Hard Skills**: Highlights the hard skills taught in each course and required for the major.
* **Word Cloud (Hard and Soft Skills)**:
* Visualizes the most frequently mentioned hard and soft skills across all majors.
* Helps users quickly identify the key skills that are in demand for various fields.

The decomposition tree and word cloud together provide a comprehensive view of how courses, skills, and majors are interconnected, enabling users to plan their education and career path effectively.