**Studify Python Dashboard Documentation**

**Platform: Python | Deployment: Streamlit**

**Link:** [**Studify Streamlit Dashboard**](https://studify-dashboard.streamlit.app/?embed_options=dark_theme,show_footer,show_padding,disable_scrolling,show_toolbar,light_theme,show_colored_line)

**1. Introduction**

The **Studify Dashboard** is a Python-based analytics platform created to visualize course and student performance data across the Studify ecosystem. Built using the **Streamlit framework**, the dashboard serves as an interactive interface for real-time exploration of educational trends including course subscriptions, student demographics, engagement patterns, and content distribution.

The dashboard offers dynamic filters for **course level, category, age group, language, and number of countries to display**, enabling granular analysis by end-users without technical expertise.

**2. Target Audience**

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| --- | --- |
| **Role** | **Purpose** |
| **Academic Leadership** | Monitor engagement across countries, age groups, and topics |
| **Course Instructors** | Understand enrollment status, ratings, and student reach |
| **Marketing Teams** | Identify top-performing courses, categories, and geographies |
| **Product Managers** | Optimize content strategy and new course development |
| **Data Analysts** | Generate insights for retention, quality, and content delivery |

**3. Filter Panel**

* **Course Level** – Filter data by Beginner, Intermediate, Expert, or All.
* **Category** – Filter content based on business domains (e.g., IT, Business, etc.).
* **Age Group** – Target audience segment by age (e.g., 18–25).
* **Number of Countries to Show** – Slider to dynamically control scope of geographical analysis.
* **Language** – View course data for specific language offerings (e.g., English).

**4. Dashboard Sections and KPI Explanations**

**A. Metrics Summary**

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| --- | --- |
| **Metric** | **Description** |
| **Total Courses** | Total number of courses available on the platform (30.1K). |
| **Average Course Rating** | Overall rating average across all courses (4.4). |
| **Max Course Price** | The most expensive course listed ($955.9). |
| **Average Course Price** | Average of all listed course prices ($61.85). |
| **Total Students** | Count of enrolled users across the platform (60.0K). |
| **Total Instructors** | Number of active course instructors (9,536). |
| **Student AVG Age** | Average age of the enrolled student base (28 years). |
| **Number of Countries** | Number of student-represented countries (46). |

**Insight:** The platform serves a globally distributed, young adult demographic with a healthy instructor base and diverse pricing.

**B. Top 10 Courses by Subscribers**

**Chart Type:** Bar Chart  
**Purpose:** Displays the courses with the highest subscription count within a selected category and age group.

**Insight:** Courses like “The Complete SQL Bootcamp” and “Microsoft Power BI” dominate subscriber counts, signaling high demand for data and business analytics skills.

**Action:** Promote similar content and explore advanced-level extensions of these topics.

**C. Course Enrollment Status**

**Chart Type:** Pie Chart  
**Metrics:**

* In Progress (47.9%)
* Completed (32.2%)
* Not Started (19.9%)

**Insight:** A large portion of students remain mid-way through courses, which could indicate a need for motivational nudges, progress reminders, or adaptive pacing.

**Action:** Implement reminder systems and gamification elements to improve completion rates.

**D. Average Rating by Top 10 Categories**

**Chart Type:** Horizontal Bar Chart  
**Metrics:** Average student ratings across top course categories.

**Insight:** "Health & Fitness," "Design," and "Lifestyle" receive the highest satisfaction, whereas "Teaching & Academics" and "Photography & Video" show lower ratings.

**Action:** Reassess course content and instructor quality in low-rated categories. Maintain standards and expand offerings in high-performing categories.

**E. Student Country Distribution**

**Chart Type:** Bar Chart  
**Scope:** Top 10 countries for students aged 18–25  
**Top Countries:** United States, China, United Kingdom

**Insight:** North America and Asia dominate student enrollment, particularly among younger age groups.

**Action:** Focus marketing and localized offerings (languages, payment systems) in these regions to maximize reach.

**F. Top 10 Subcategories by Number of Courses**

**Chart Type:** Bar Chart  
**Purpose:** Shows which subcategories have the most courses available (English language only).  
**Top Subcategories:**

* E-commerce
* IT Certifications
* Cryptocurrency & Blockchain

**Insight:** The platform is heavily geared toward tech, business, and professional certification.

**Action:** Ensure diversity of topics and balance technical with soft skills or creative areas for broader appeal.

**5. Technical Implementation**

| **Aspect** | **Description** |
| --- | --- |
| **Language** | Python |
| **Framework** | Streamlit |
| **Deployment** | Streamlit Cloud |
| **Interactivity** | Powered by widgets and sliders (filters) |
| **Visualization** | Matplotlib, Plotly, or Altair (depending on backend choices) |
| **Data Aggregation** | Pandas and/or external APIs, processed in real-time |

**6. Key Takeaways & Strategic Recommendations**

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| --- | --- | --- |
| **Area** | **Insight** | **Suggested Action** |
| Course Engagement | Nearly 50% in-progress status | Introduce course checkpoints and progression rewards |
| Top Courses | Data-related courses dominate | Invest in partnerships with data/tech professionals |
| Regional Focus | U.S., China, UK dominate student base | Enhance geo-targeted marketing and currency options |
| Ratings Variation | Some categories underperform | Conduct content quality audits and surveys |
| Age Demographic | Young adult users (avg age: 28) | Focus on career-boosting, certification-aligned topics |

**7. Conclusion**

The **Studify Dashboard**, built using **Python and Streamlit**, offers a highly functional and visually cohesive tool for monitoring educational platform trends. Its interactive filters, clear visuals, and real-time responsiveness make it suitable for data-driven decision-making across teams. As the platform continues to scale, the dashboard serves as a core asset in aligning user demand with content delivery and operational strategy.