

Detail Comparison table of Streamlit, Dash, NiceGUI and Bokeh

FEATURES	STREAMLIT	DASH	NICEGUI	BOKEH
EASE OF USE	Very Easy	Moderate		
UI CUSTOMIZATION	Limited	Highly Customizable		
INSTALLATION	<code>pip install streamlit</code>	<code>pip install dash</code>		
RUN THE APP	<code>streamlit run app.py</code>	<code>python app.py</code>		
BEST FOR	Quick dashboards & data apps	Interactive data driven apps		
BACKEND REQUIRES?	No	No		
PERFORMANCE	Fast	Faster		
INTEGRATION	Pandas, Matplotlib, Plotly	Plotly, Pandas, Matplotlib		
STATE MANAGEMENT	Limited	Built-in		
SUPPORTS REAL TIME UPDATE?	Via Session state	Via callbacks		
SUPPORT MULTIPAGES?	No	Yes		
MOBILE RESPONSIVENESS	Basic	Good		
DEPLOYMENT	Easy	Moderate		
LEARNING CURVE	Very Easy	Moderate		
GITHUB STARS	37k + 🌟	21.9k 🌟		
USED BY	680k +	75.5k +		
USE CASES	ML Models, Dashboards, Analytics	Data dashboard, enterprise apps		

SCALABILITY	Limited for large app	Good for large apps		
COMMUNITY SUPPORTS?	Strong, fast growing	Large		
SECURITY FEATURES?	Basic (limited authentication)	Advanced auth, role management		
MEMORY USAGE	Moderate (Can be high for large dataset)	Optimized for large data sets		
NATIVE DARK MODE SUPPORT?	Yes (Built in)	No (Requires CSS Styling)		
DATABASE CONNECTIVITY	Yes (Supports SQL, Snowflake, Pandas)	Yes (PostgreSQL, MySQL, MongoDB via flask)		
NATIVE MOBILE APP SUPPORT?	No (Web based only)	No (Requires React native for mobile)		
PRICING	Free (Open source) + Streamlit Cloud (Paid for deployment)	Free (Open source) + Dash Enterprise (Paid)		
CSS STYLING SUPPORT?	Limited (No direct CSS customization, only theme changes)	Fully customizable via CSS and Bootstrap		