



Micro:bit

BitBois

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Classroom Use Case

User + Environment Description

Users	Environment
High School Teachers	High school classrooms
High School Students	
Middle School Teachers	Middle school classrooms
Middle School Students	

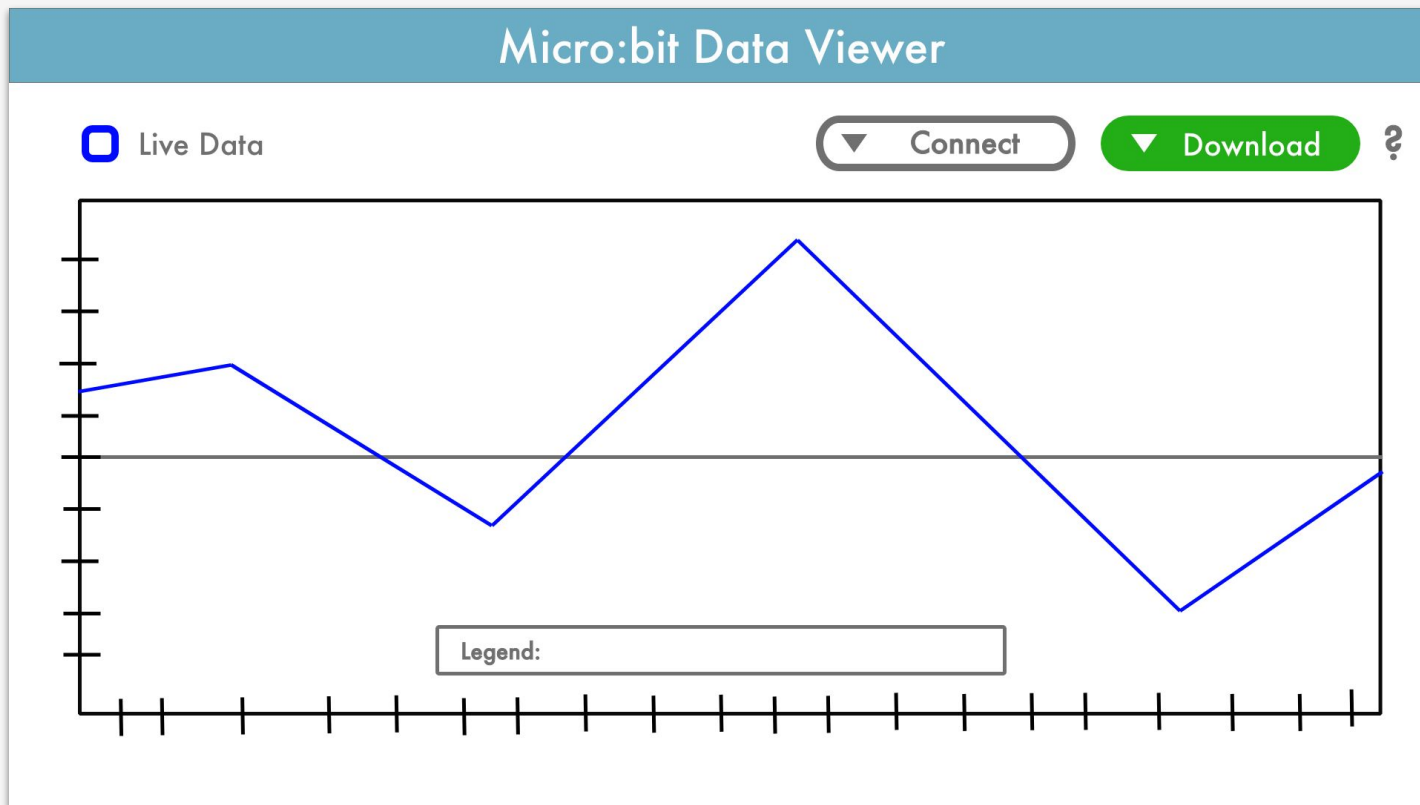
Use Case Scenario

- The user will connect x amount of Micro:bits to their computer through the UI.
- Once all the Micro:bits are connected, the user can begin recording data on each Micro:bit.
- Recorded data will be streamed back to the user's computer in real time via a graph in the UI.
- The graph will contain a legend where the user can choose which data type they would like to view in the graph.
- The user then has the ability to pause, resume, or stop the recording to zoom in or download to a CSV file.

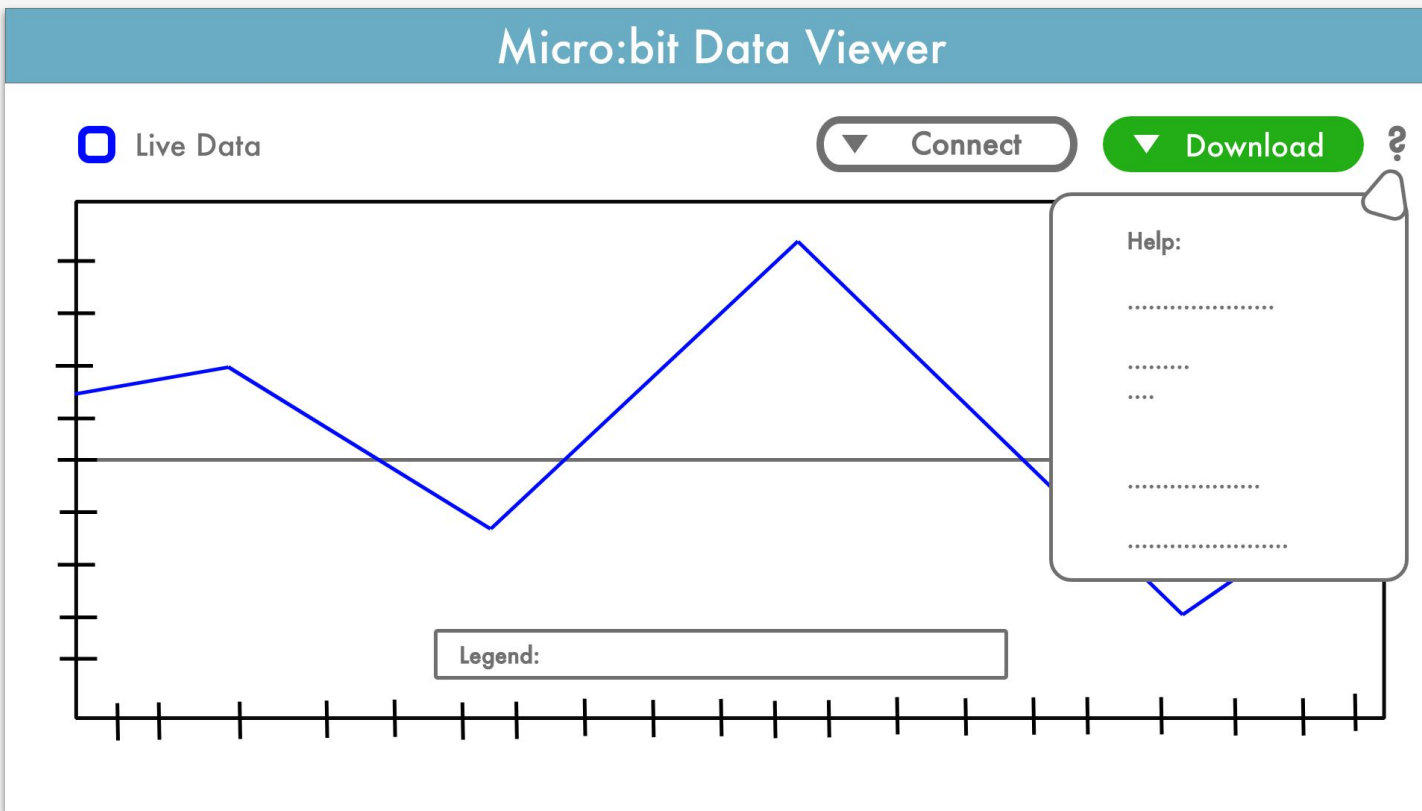
Error Case Scenario

- The user launches the Micro:bit visualization web application
- The user attempts to connect multiple Micro:bits
 - The user turns on Micro:bit 1
 - The user mistakenly selects to connect to Micro:bit 3
 - The application fails after some time and warns the user:
 - They may have made an error on the connection stage
 - They may need to go back and confirm correct Micro:bit connection
 - The user properly connects to Micro:bit 1
- The user can proceed to use application as planned

Paper Views



Extra Content + Help Views



Usability Goals + Concerns

Goals:

- Easy to use
- Functional
- Easy to learn
- Responds Quickly

Concerns:

- Live data and zoom/pan conflicting
- MicroBit differentiation