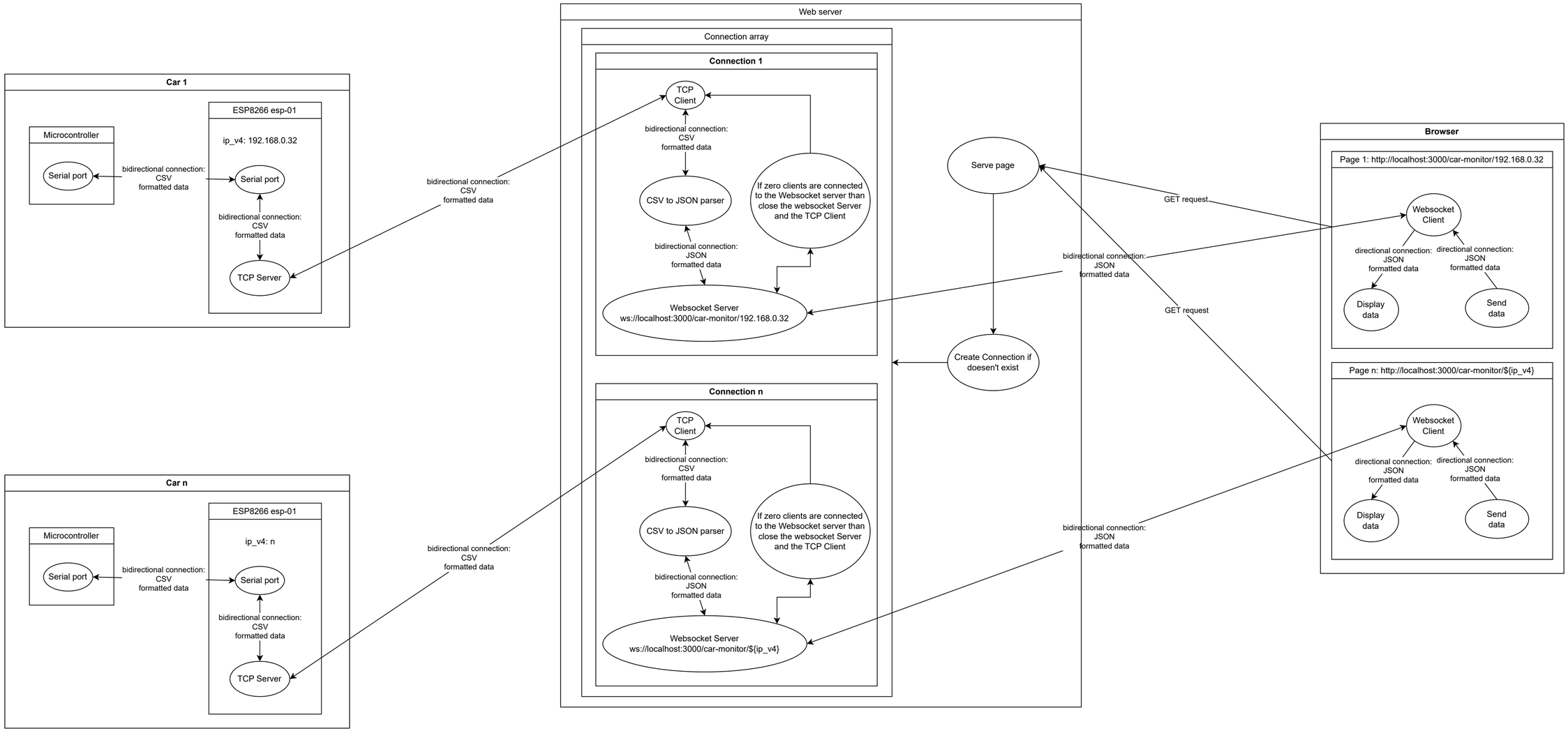
Car 1
Microcontroller
Serial port
bidirectional connection: CSV formatted data
ESP8266 esp-01
ip_v4: 192.168.0.32
Serial port
bidirectional connection: CSV formatted data
TCP Server
Car n
Microcontroller
Serial port
bidirectional connection: CSV formatted data
ESP8266 esp-01
ip_v4: n
Serial port
bidirectional connection: CSV formatted data
TCP Server
bidirectional connection: CSV formatted data
bidirectional connection: CSV formatted data
Web server
Connection array
Connection 1
TCP Client
bidirectional connection: CSV formatted data
CSV to JSON parser
If zero clients are connected to the Websocket server than close the websocket Server and the TCP Client
bidirectional connection: JSON formatted data
Websocket Server ws://localhost:3000/car-monitor/192.168.0.32
Connection n
TCP Client
bidirectional connection: CSV formatted data
CSV to JSON parser
If zero clients are connected to the Websocket server than close the websocket Server and the TCP Client
bidirectional connection: JSON formatted data
Websocket Server ws://localhost:3000/car-monitor/${ip_v4}
Serve page
Create Connection if doesen't exist
GET request
bidirectional connection: JSON formatted data
GET request
bidirectional connection: JSON formatted data
Browser
Page 1: http://localhost:3000/car-monitor/192.168.0.32
Websocket Client
directional connection: JSON formatted data
directional connection: JSON formatted data
Display data
Send data
Page n: http://localhost:3000/car-monitor/${ip_v4}
Websocket Client
directional connection: JSON formatted data
directional connection: JSON formatted data
Display data
Send data