Bluetooth fra nettlesern

Hvordan kommunisere med duppeditter fra nettlesern over Bluetooth.

Bluetooth Low Energy (BLE)

Snacksy standard for kommunikasjon med duppeditter.

Connect til en duppeditts tjenester

```javascript
const device = await navigator.bluetooth.requestDevice({
  filters: [{ services: ["heart_rate"] }],
});

const server = await device.gatt.connect();
console.log("Server connected:", server);

const heartRateService = await server.getPrimaryService("heart_rate");
console.log("Heart rate service connected:", server);
```

Les en tjenestes verdi

```javascript
const heartRateCharacteristic = await heartRateService.getCharacteristic(
  "heart_rate_measurement"
);
{
  oncharacteristicvaluechanged: null,
  properties: {
    authenticatedSignedWrites: false,
    broadcast: false,
    indicate: false,
    notify: true,
    read: false,
    reliableWrite: false,
    writableAuxiliaries: false,
    write: false,
    writeWithoutResponse: false,
  },
  service: {
    device: BluetoothDevice,
    uuid: '0000180d-0000-1000-8000-00805f9b34fb',
    isPrimary: true
  },
  uuid: "00002a37-0000-1000-8000-00805f9b34fb",
  value: null,
}
```

Les en tjenestes verdi

```javascript
const heartRateCharacteristic = await heartRateService.getCharacteristic(
  "heart_rate_measurement"
);

// Lytt etter varsler
heartRateCharacteristic.addEventListener(
  "characteristicvaluechanged",
  (event) => {
    const rawValue = event.target.value;
    // rawValue er et DataView aka mer eller mindre rå byte-data
    const hr = rawValue.getUint8(1);
    console.log("Puls:", hr);
  }
);
// Gi oss varsler når verdien endres
heartRateCharacteristic.startNotifications();
```

Hele greia

```javascript
const device = await navigator.bluetooth.requestDevice({
  filters: [{ services: ["heart_rate"] }],
});
const server = await device.gatt.connect();
console.log("Server connected:", server);
const heartRateService = await server.getPrimaryService("heart_rate");
console.log("Heart rate service connected:", server);
const heartRateCharacteristic = await heartRateService.getCharacteristic(
  "heart_rate_measurement"
);
console.log("heartRateCharacteristic:", heartRateCharacteristic);
// Lytt etter varsler
heartRateCharacteristic.addEventListener(
  "characteristicvaluechanged",
  (event) => {
    const rawValue = event.target.value;
    // rawValue er et DataView aka mer eller mindre rå byte-data
    const hr = rawValue.getUint8(1);
    console.log("Puls:", hr);
  }
);
// Gi oss varsler når verdien endres
heartRateCharacteristic.startNotifications();
```

HR-service-spec

Hvorfor er det fett at man kan gjøre dette gjennom nettlesern?

- Lavere terskel for interaksjon med duppeditter?