



Web Payments

TPAC 2019



jtoupin@google.com, rouslan@google.com, sahel@google.com

Payment Request 1.0

Implementation Status

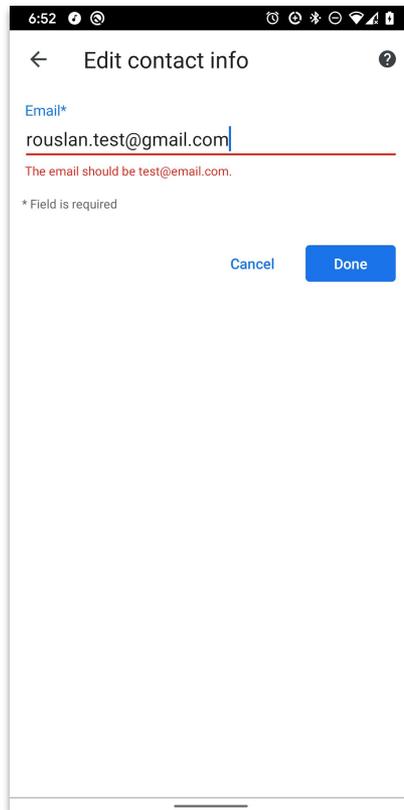
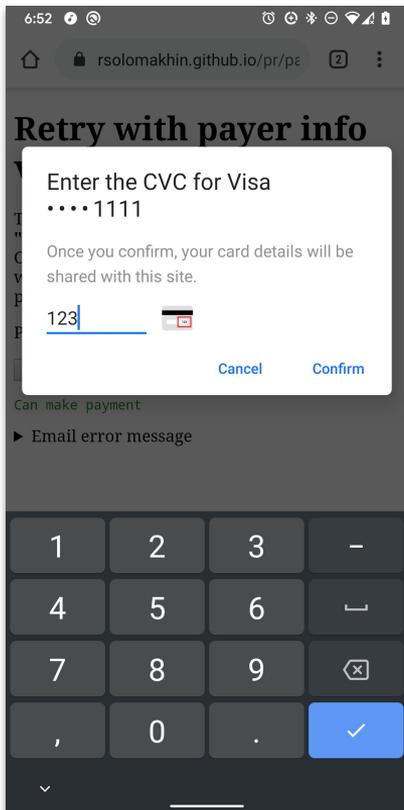
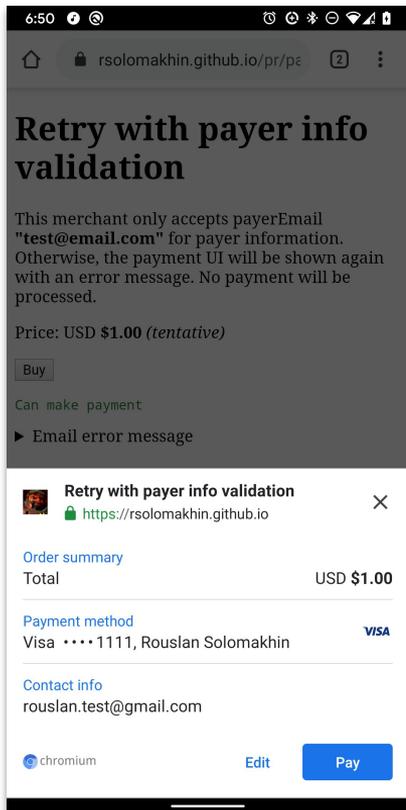
What is outstanding from a Chrome perspective?

1. Feature Policy bug: crbug.com/972089 (ETA: Chrome 80)

Retry()

Status: Chrome 78 (thank you, Jinho!)

TL;DR: Retry payment after user authorized payment.



Payment Handlers

Agenda

- Value proposition
- Demos
- Discussion

Payment Handler value proposition *to payment applications*



What are we focused on to improve the value proposition for Payment Handers?

1. Change events
2. Full delegation
3. Improved ergonomics
4. Additional UI options

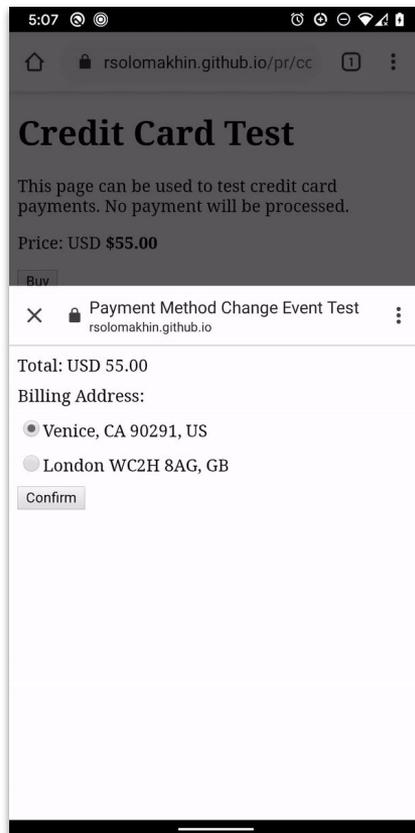
Payment method change event

Status: Chrome 76

TL;DR: Get updated total from merchant when user selects a card in the handler

```
// Payment handler:
paymentRequestEvent.changePaymentMethod(
  'https://google.com/pay',
  {billingCountry: 'GB'});

// Merchant:
paymentRequest.addEventListener(
  'paymentmethodchange', (evt) => {
    evt.updateWith({
      total: {
        label: 'Updated total',
        amount: {
          currency: 'USD',
          value: '60.00',
        },
      },
    });
  });
```

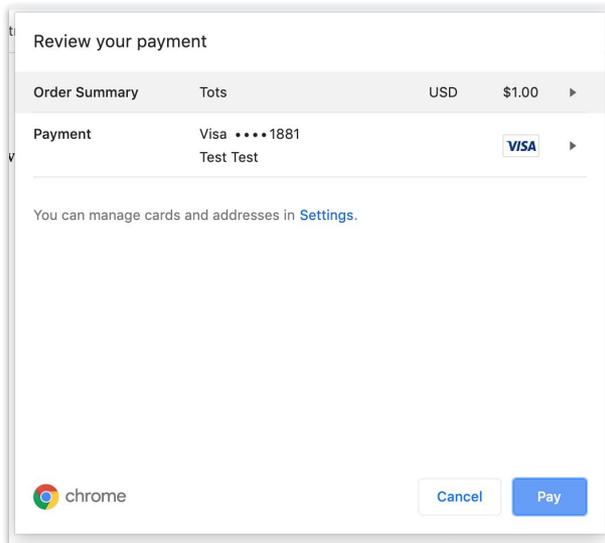


JIT Install

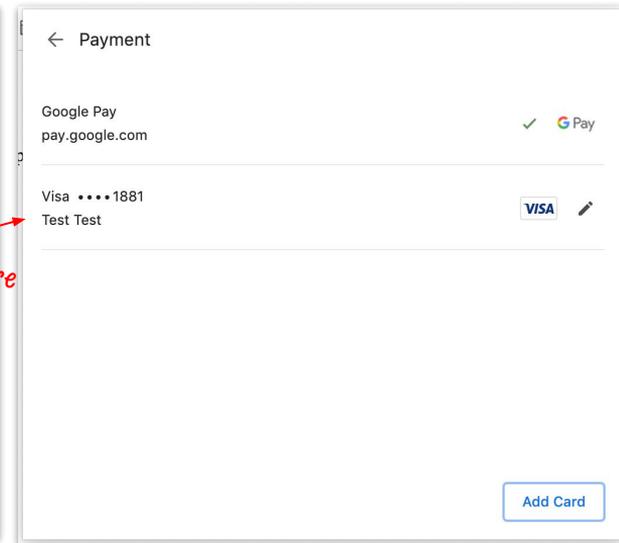
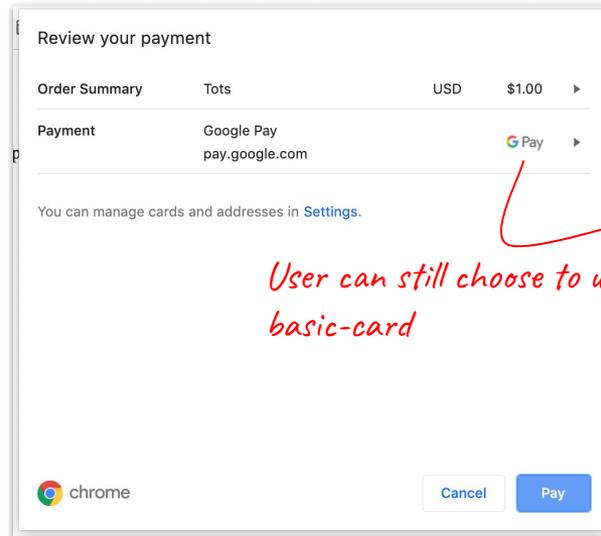
Status: Chrome 77. 50% rollout in Canary, Dev, Beta channels

TL;DR: Expand JIT to all URL-based payment methods in a payment request, even if basic-card is also requested

Before



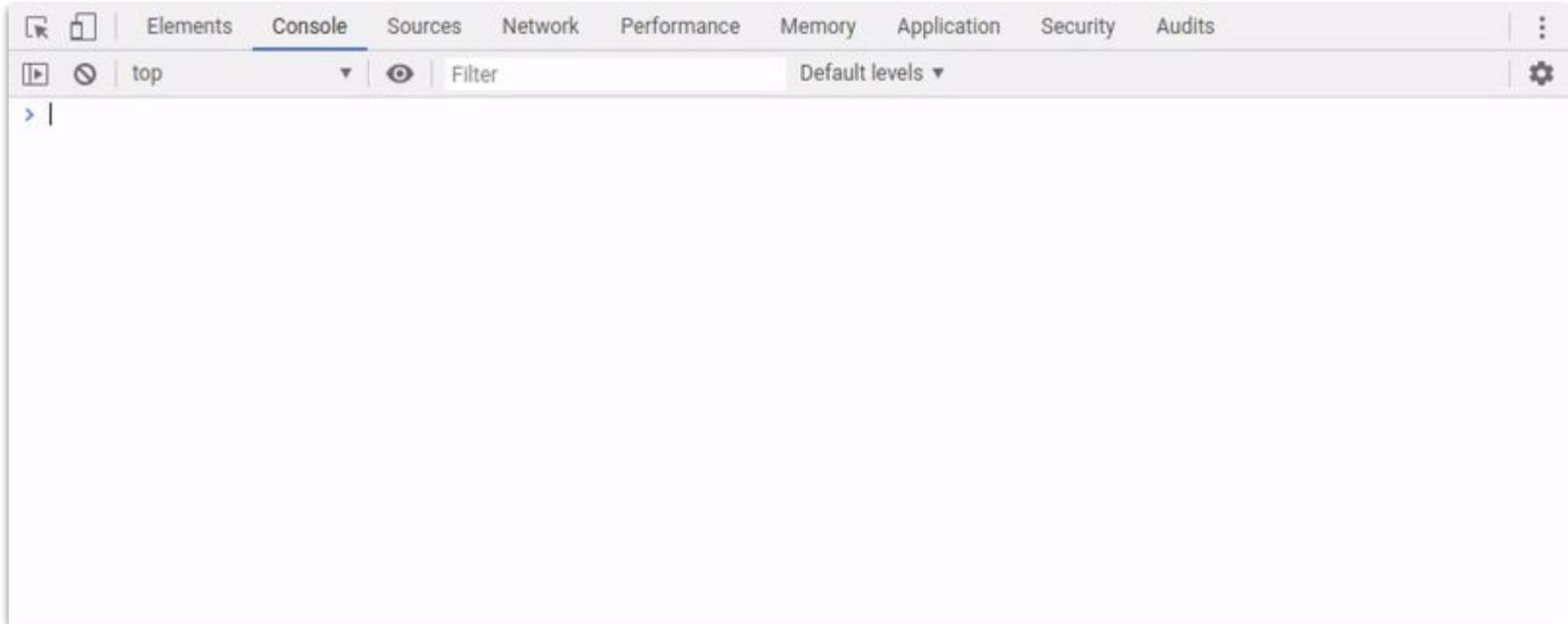
After



Payment handler event logging

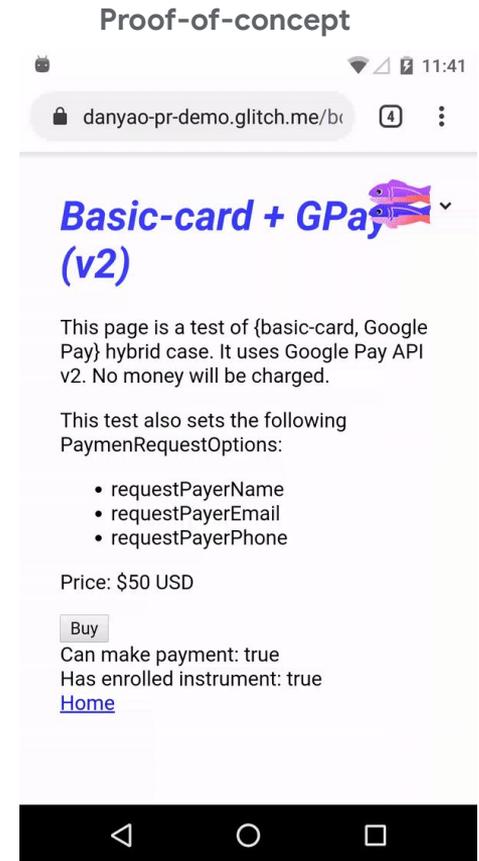
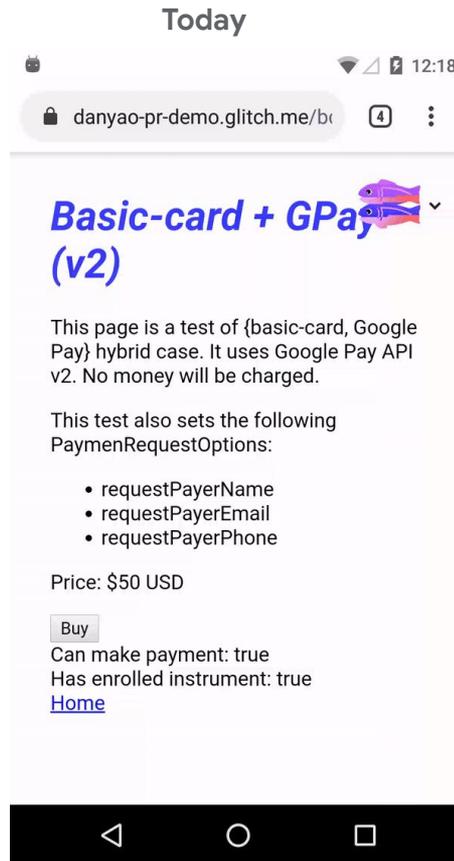
Status: Chrome 78

TL;DR: Inspect payment handler events in Chrome developer tools.



Enable delegation to payment handlers

TL;DR: Enable payment handlers to handle all information requested by the merchant



PH delegation: adaptive section display

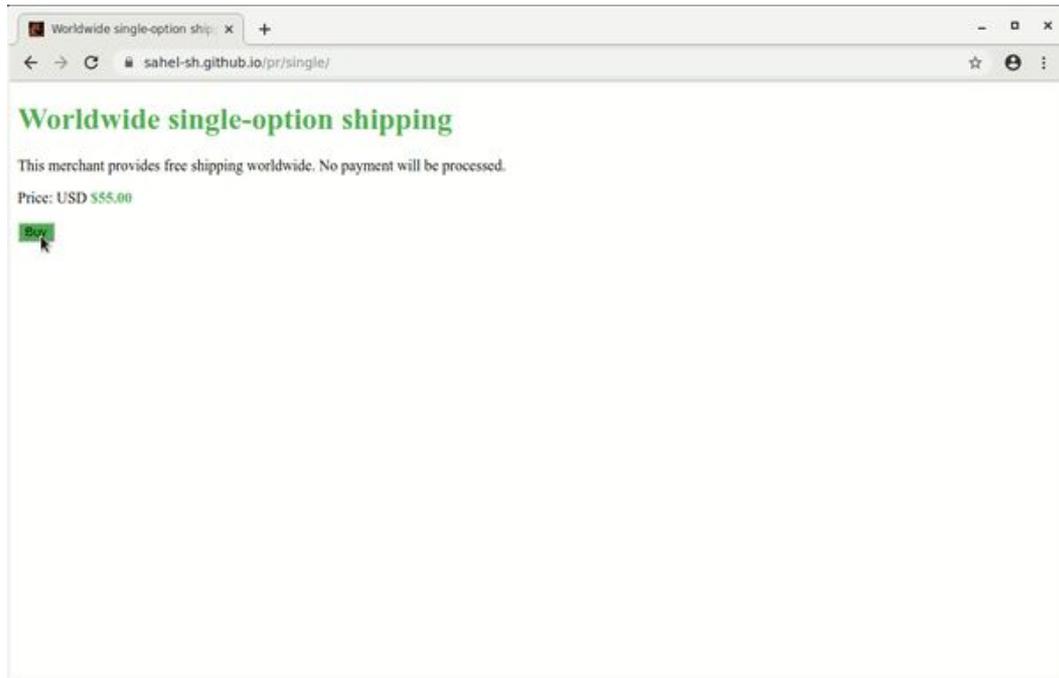
Status: Chrome 79

TL;DR: Shipping/contact sections not shown in payment sheet if the selected PH supports delegation

```
// Payment handler:  
await registration  
.paymentManager  
.enableDelegations([ 'shippingAddress',  
                      'payerName',  
                      'payerPhone',  
                      'payerEmail' ]]);
```

Explainer:

[w3c/payment-handler/issues/337](https://w3c.org/TR/payment-handler/issues/337)



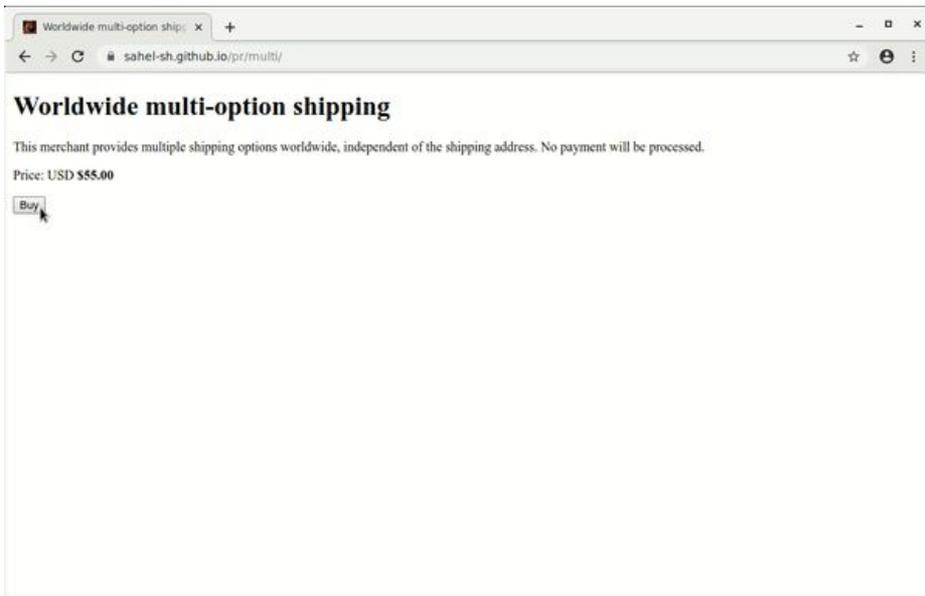
PH delegation: shipping address/option change

Status: Chrome 79

TL;DR: PHs can send shipping address/option change events and get updated details from merchant

```
// Payment handler:
paymentRequestEvent.changeShippingAddress({
  addressLine: [
    '340 Main St',
  ],
  city: 'Venice',
  country: 'US',
  ...
  region: 'CA',
});
paymentRequestEvent.changeShippingOption(
  'express');
```

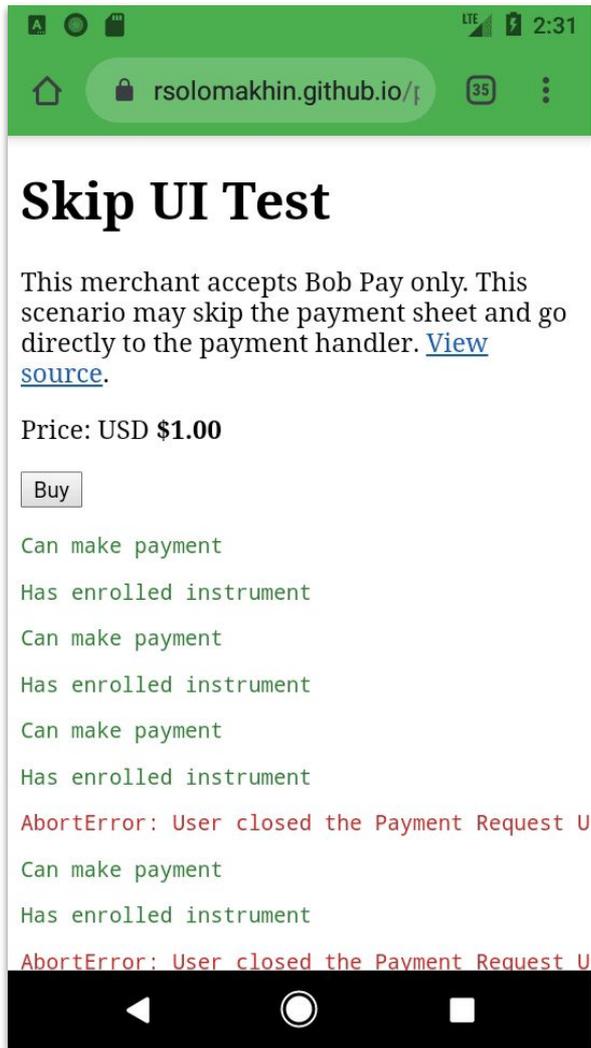
```
// Merchant:
paymentRequest.addEventListener(
  'shipping[address|option]change',
  (evt) => {
    evt.updateWith( ... );
  });
```



Scroll to expand

Status: Chrome 80 (tentative)

TL;DR: Payment sheet expands to full screen for large payment sheets upon user interaction



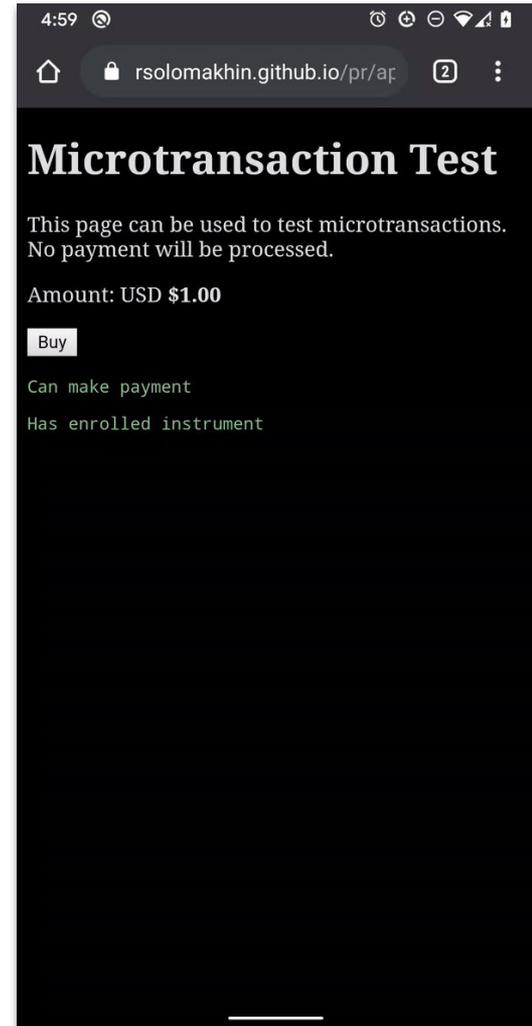
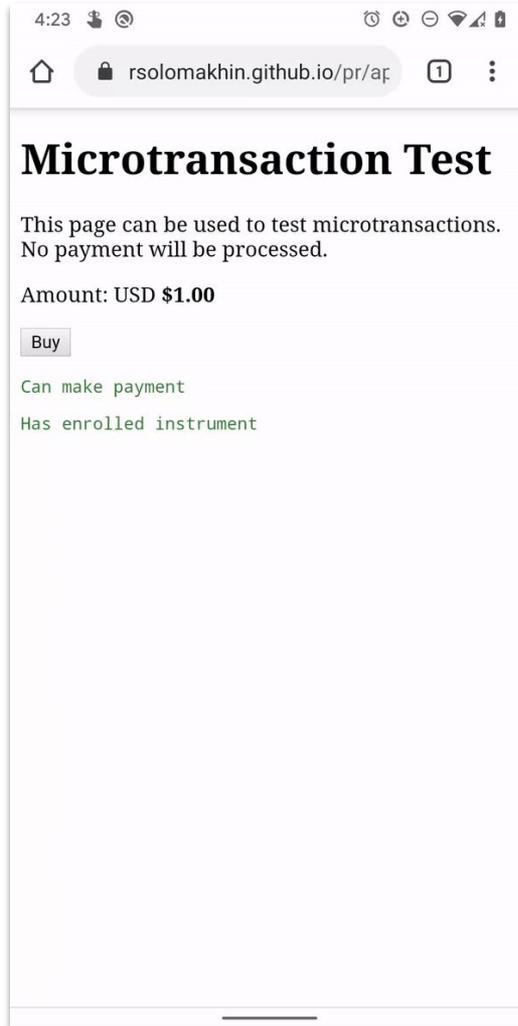
Minimal UI flow

Status: Experimental.

Looking for feedback.

Why?

- Use-cases that don't require large UI footprint
- Seamless user verification



Discussion Topics [1 of 3]

- What else can we do to ensure payment handler succeed?
New features? Different use-cases?

Discussion Topics [2 of 3]

- Should **JIT install** & **skip-the-sheet** be included in the Payment Handler spec?

Discussion Topics [3 of 3]

- Feedback on the **minimal UI flow**?