# A Changing Culture: Innovative Technology to Improve the Scholarly Experience

Low Price Self Checkout Kiosk Intuitive to use | Easy to implement | Simple to manage



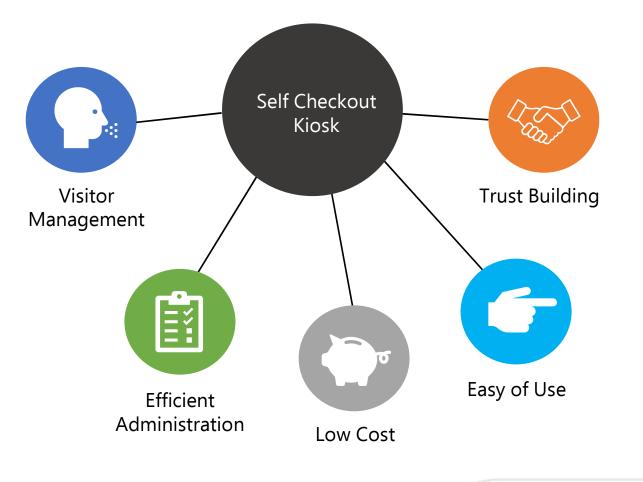
User

Checkout Kiosk

Alma

### Good reasons

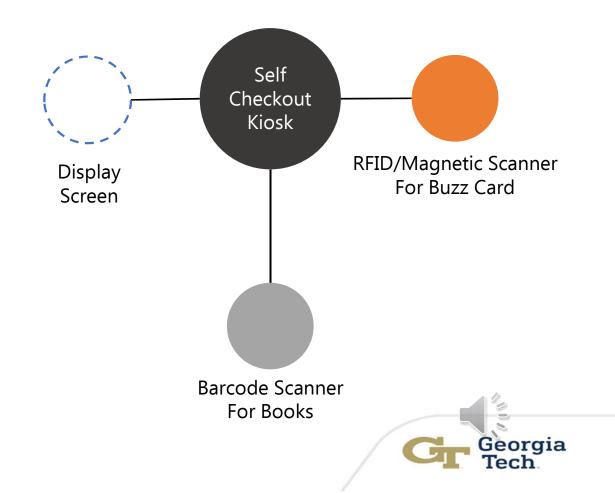
- Trust building
- Covid-19 secure visitor management
- Efficient and accurate administration
- Low cost
- Easy to implement, maintain, and use



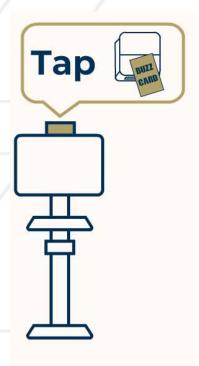


## Hardware – Main components



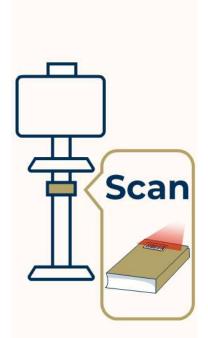


### **Overview** – Workflow



Step 1

Tap Buzz card

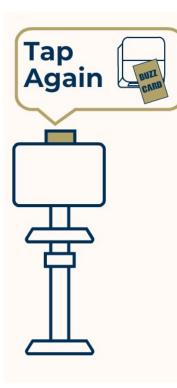


Step 2

Scan books

Step 3 Tap Buzz card again to complete



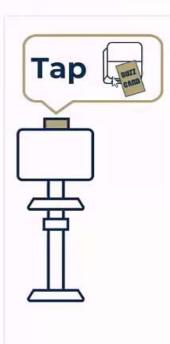




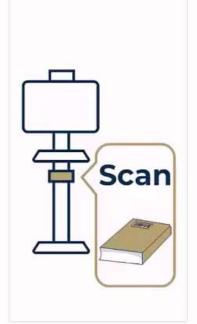




Self Checkout



Step 1 Tap Buzz card to start



Step 2 Scan book barcode



Step 3 Tap Buzz card to complete



## **GUI:** Form Plus Framework

### Form Framework with Validation & Calculation

### **Forms Plus**

**Froms Plus** is a form framework. **JS version** includes everything **CSS** has, plus date/time pickers, color pickers, sliders, captcha fields, spinners, field groups (for code, credit card number, etc.),

masked fields, actions blocks (add/remove/show/hide/toggle blocks with buttons, links, checkboxes, selects), image uploads, checkboxes and radio buttons (with toggle all, untoggle, groups and subgroups, etc.), and lots of features done with power of **Javascript**, **jQuery**, **CSS** and **PHP**.

**Froms Plus** has collection of contact, user, ecomerce forms, example of results page and allows you to create forms of any complexity.

This product includes CSS, HTML, PHP, and Javascript.

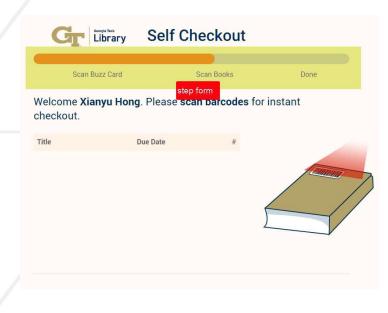




### **GUI:** Form Plus Framework

### Self checkout APP uses

- Step form (1-2-3 steps) <a href="https://apps-stage.library.gatech.edu/self-checkout/test/documentation/index.html#js-steps">https://apps-stage.library.gatech.edu/self-checkout/test/documentation/index.html#js-steps</a>
- Ajax https://apps-stage.library.gatech.edu/self-checkout/test/documentation/index.html#ajax
- Blocks/Actions <a href="https://apps-stage.library.gatech.edu/self-checkout/test/documentation/index.html#blocks">https://apps-stage.library.gatech.edu/self-checkout/test/documentation/index.html#blocks</a>



Where <block name> can be set on any tag with data-js-block="<block name>"



Showinglhiding data blocks can be used to show[hide loading bars, hiding form on success, showing "thank you" messages, et Full JSON success responce example:



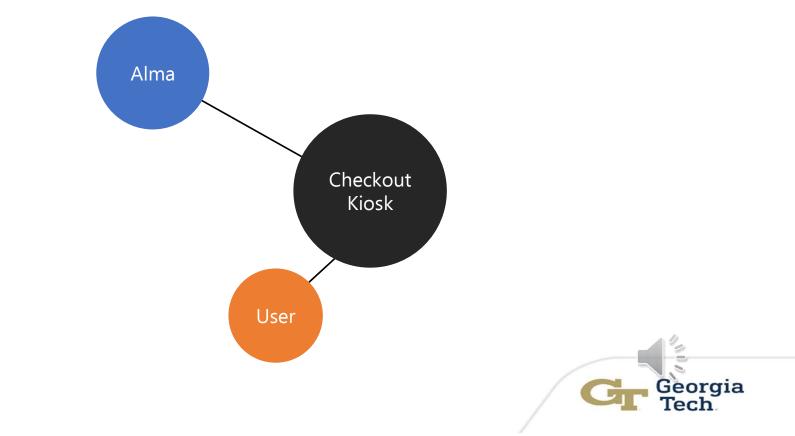


### **GUI:** Form Plus Framework





# **Application** - Overview



## Application – REST & CRUD



PUT, DELETE

Mobile/Web/ desktop client



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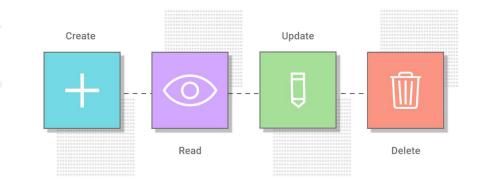
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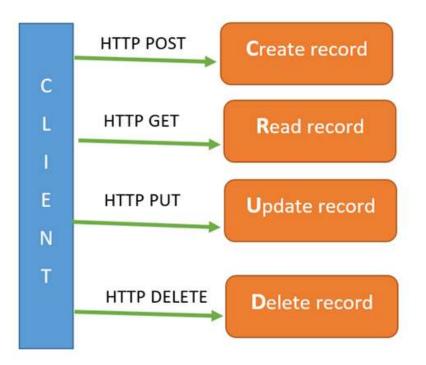
Server

### **REST API Model**

## Application – REST & CRUD

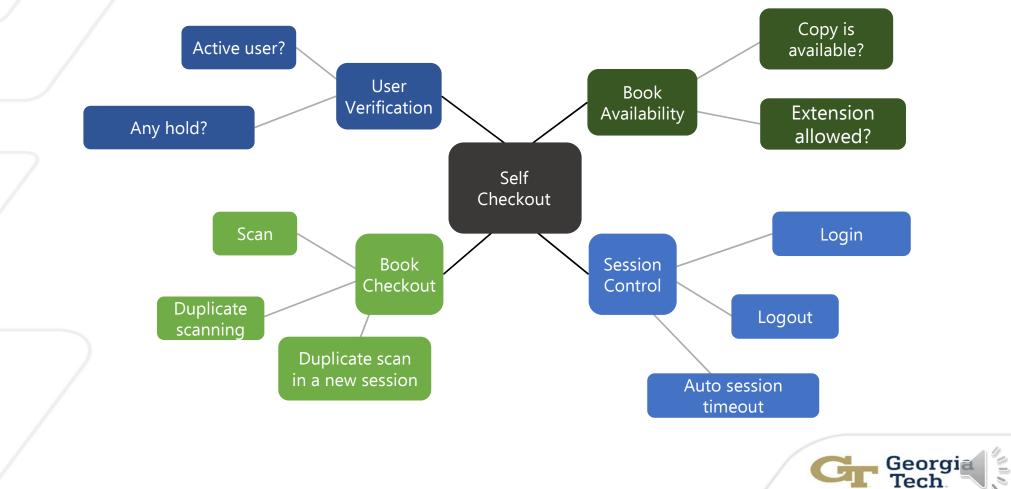


FLAWLESSAPP.IO





## **Application - Main functions**



## **Restful:** HTTP Request Client

### **Requests for PHP**

A humble HTTP request library. Simplify how you interact with other sites and leave your worries behind.

WpOrg\Requests\Requests::get('https://api.github.com/', array('Accept' => 'application/json'));

Never touch cURL again.

https://requests.ryanmccue.info/

### **GET Request**

\$response = WpOrg\Requests\Requests::get('https://api.github.com/events');

### **POST Request**

```
$data = array('key1' => 'value1', 'key2' => 'value2');
$response = WpOrg\Requests\Requests::post('https://httpbin.org/post', array(), $data);
var dump($response->body);
```

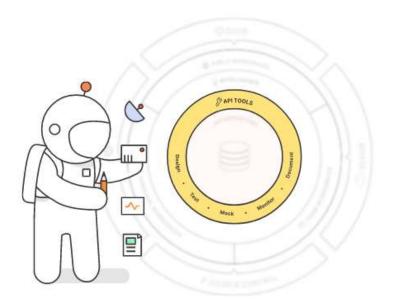
php curl print status

-	<pre>\$url = 'https://api.github.com/events';</pre>
	<pre>\$ch = curl init(\$url);</pre>
1.42	<pre>curl_setopt(\$ch, CURLOPT_HEADER, true); // we want headers</pre>
4	<pre>curl_setopt(\$ch, CURLOPT_NOBODY, true); // we don't need bod</pre>
5	<pre>curl_setopt(\$ch, CURLOPT_RETURNTRANSFER,1);</pre>
6	<pre>curl_setopt(\$ch, CURLOPT_TIMEOUT,10);</pre>
7	<pre>\$output = curl_exec(\$ch);</pre>
8	<pre>\$httpcode = curl_getinfo(\$ch, CURLINFO_HTTP_CODE);</pre>
9	<pre>curl_close(\$ch);</pre>
10	
11	echo 'HTTP code: ' . \$httpcode;
Sour	rce: stackoverflow.com
get I	http code curl php

```
1 $info = curl_getinfo($ch, CURLINFO_HTTP_CODE);
2
3 curl_close($ch);
4 if ($info == 200){
5 return json_decode($result);
6 }
```



# API Tool: Postman



https://www.postman.com/



## API Tool: Postman Quick demo

#### Get users



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# Hardware design: Comparison









