

# Vex System

Group 4

April 8, 2020

# Team Role

- Lingjue Zhou: Team Leader | Front-end | Back-end
- Yue Guan: Back-end – PHP Scripting
- Yufan Shen: Back-end – PHP Scripting
- Jingxiang Ma: UI design – User & Admin Design
- Maka Hu: UI design – Home & Editor Design
- Penghan Yan: Back-end – Database, PHP Scripting
- Xiaoyu Wang: Front-end – Editor features

# How the Engine Works

- Drag & Drop
- Page Operations
- Live system

# Drag & Drop

## How to work

- Events: dragstart, dragend, dragover & drop
- Component's code will be stored in jQuery's OriginalEvent.DataTransfer Object

### Component:

```
data-insert-html = " <h1>Header</h1>"
```

```
draggable = "true"
```



A

Header

# Page Operation

## Create / Update / Delete

- Using ajax to send GET, POST requests to PHP to create/update/delete pages

- ```
` $.ajax({  
    type: "POST",      //Define POST request  
    url:  "../lib/project.php",  
    async: true,  
    timeout: 5000,  
    data: {  
        type: "update", //operation type(save, create, delete, etc.)  
        id: id,          //page id  
        name: name,      //page name  
        page: code,      //page html  
    },  
    success: function (data) {  
        var data = JSON.parse(data);  
        //After server responded, do something  
        if (data.status == true) {  
            //Responded success  
        } else {  
            //Failed  
        }  
    },  
    error: function (jqXHR, textStatus, errorThrown) {  
        //If timeout or other communication error  
    }  
});`
```

# Live System

- Once user published their pages, guest user could access the page through link.
- The live system will check the link if is valid, and make sure the related page is still open to public.

```
if ($page_is_delete === 'f' && $page_is_live === 't' ) {  
    echo $page_result[3];  
} else {  
    pageNotFound($page_id);  
}
```

- Editor page allows guest and existed users to design their own pages, it provides a component panel which allow users to drag component into their working area.
- Provide attributes setting for elements.
- Only existed user can save pages into cloud system.

# Theory of Operation

## Page modification/deletion

- Once the users created a page, it will display it in the project list panel. User may select one of the page to update the content. It will sent post request by ajax, the backend will handle the request and update into the database.
- Similar procedure for page deletion. After deletion, the page will disappear in the project list panel.



- After users have saved pages, they may publish their pages by turn the live switch in project list panel. Once the switch turned into green, that means the page has been published.
- After the page has been published, guest user could access their page through link.

# Demo

It's time for a little demonstration

Let's start with our homepage.

▶ [Vex Homepage](#)