

MCSS App - System Design

Super Duper Waffle Team

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CRC Cards

Admins	
<ul style="list-style-type: none">• Knows its user name and password.• Knows who made announcements.• Knows who made events.	<ul style="list-style-type: none">• events• announcements

Announcements		Post
	<ul style="list-style-type: none">• Admins	

Events		Post
<ul style="list-style-type: none">• Has pictures	<ul style="list-style-type: none">• Admins	

Abstract	Post		Announcement, Events
<ul style="list-style-type: none">• Have a title• Has an ID• knows its posting date• Has a body			

Past events	
<ul style="list-style-type: none"> • Knows it has photo(s) • Knows its title 	<ul style="list-style-type: none"> • Admins

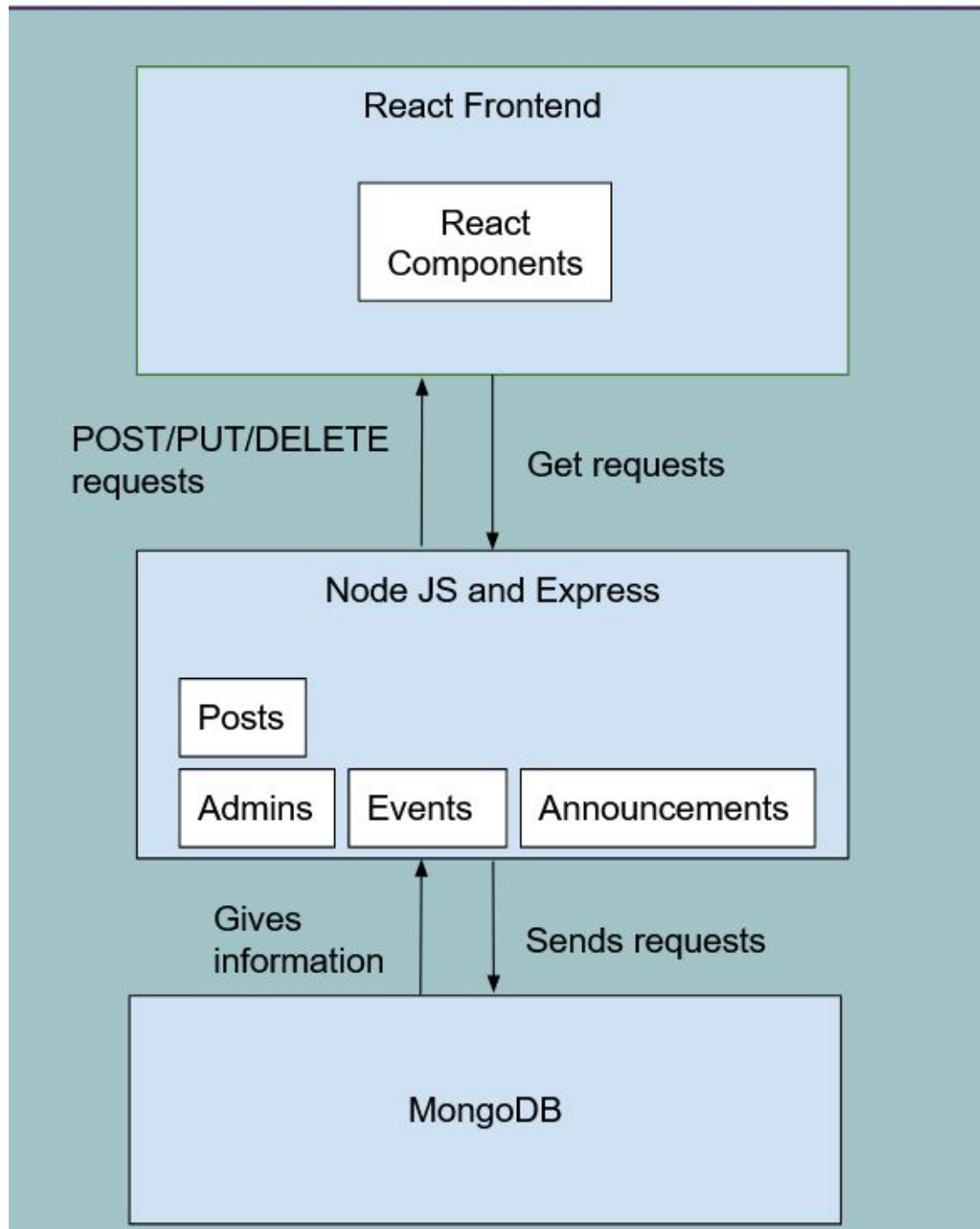
Interface	
DAO	
<ul style="list-style-type: none"> • Create a user, given username and password • Get a user, given correct username and password. • Create a post. • Get a post given its identifier. 	

System Architecture Design

We plan on using Three-Tiered-Architecture to implement our product.

<https://www.ibm.com/cloud/learn/three-tier-architecture>

<https://www.mongodb.com/mern-stack>



Strategy for dealing with errors and exceptional cases

Admin login failure - After a number of attempts of failing to login, the user will be locked out for a temporary amount of time.

Form validation - If an admin attempts to make a post, the post should not be empty or missing any required fields, otherwise they will get an error message.

Attempting to access an invalid page - If a user tries to access a page that does not exist or does not have the required permissions, they will be redirected to the home page or will see a 404 page.

Database failure - Fails to pull a request post or event, the page should express to the user that there was a failure to fetch from the database. Mongo will handle the recovery.

Server failure - If the server goes down, we want to have a solution such as Cloudflare which will be able to give users a cached page through our CDN. The executive will handle the solution.