

DATABASE DESIGN

TECHNOLOGY CHOICE

For my database I decided to go with a NoSQL database for a few reasons. First, my web app is going to have a lot of posts to it for review and tutorial articles. I looked at NoSQL databases and choose to go with MongoDB because on their site they mention how their database works well for content management and that's exactly what I need. Secondly, I choose them because I like how you have flexibility in how you structure your data. Thirdly, a lot of my content will be document based, so using a NoSQL database like MongoDB just makes sense.

I also hope to continue this project longer after completely my degree at Maryville, so as the amount of content in my web app grows I'll want a database that scales well and has lower scaling costs and MongoDB checks both of those boxes.

STRUCTURE

POSTS

Document	UML												
<pre>{ "_id": { "\$oid": "5f050341bd906f3e50b7aa95" }, "title": "Post Title", "body": "Post Content", "image": { "\$binary": "", "\$type": "0" }, "timeStamp": { "\$date": "2020-07-07T17:10:20.546Z" }, "__v": 0 }</pre>	<table><tr><th colspan="2">Posts (MVP)</th></tr><tr><td>_id</td><td>int</td></tr><tr><td>title</td><td>string</td></tr><tr><td>body</td><td>string</td></tr><tr><td>image</td><td>binary</td></tr><tr><td>timeStamp</td><td>date</td></tr></table>	Posts (MVP)		_id	int	title	string	body	string	image	binary	timeStamp	date
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_id	int												
title	string												
body	string												
image	binary												
timeStamp	date												

The posts document is needed to allow me to create, update, delete (CRUD) review and tutorial articles for the site. The posts will be in blog format, but for my MVP I do not plan to have comments on the posts. If I have time, I will be adding the ability for users to comment on articles written by me.

USERS

Document	UML												
<pre>{ "_id": { "\$oid": "5f050c43ef5533ba7941ad43" }, "username": "Muzz826", "password": "*****", "email": "muzz826@gmail.com" }</pre>	<table><tr><th colspan="2">Users</th></tr><tr><td>_id</td><td>int</td></tr><tr><td>username</td><td>string</td></tr><tr><td>password</td><td>string</td></tr><tr><td>email</td><td>string</td></tr><tr><td>timeStamp</td><td>date</td></tr></table>	Users		_id	int	username	string	password	string	email	string	timeStamp	date
Users													
_id	int												
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email	string												
timeStamp	date												

The users document will be used for user account management, authentication, and authorization. A valid user account is required to view any data within the Muzz Tech Byte's web app.