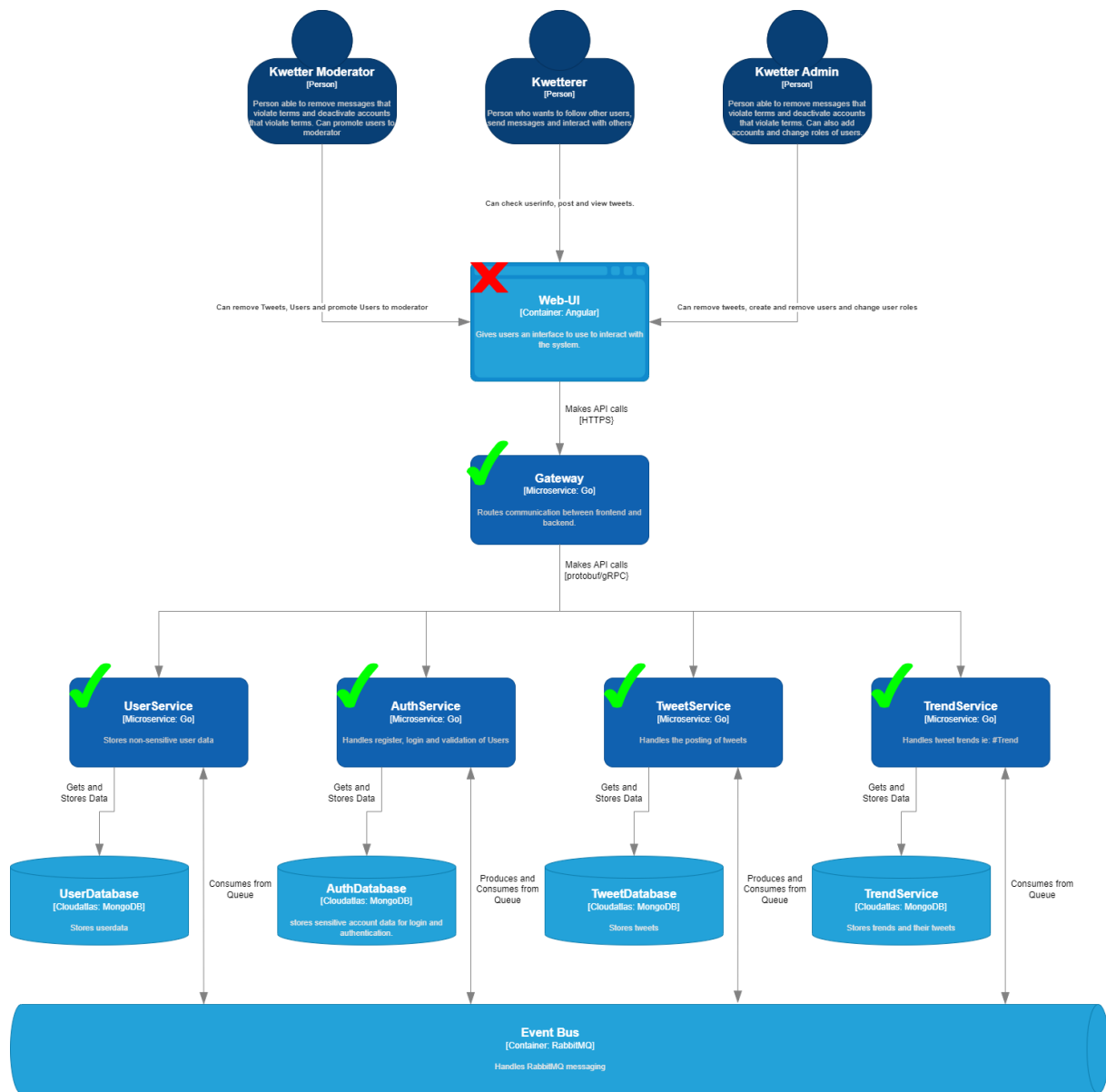


Resource Mapping



	Gateway	UserService	AuthService	TweetService	TrendService	Total
Register	1	1	1			3
Login	1		1			2
Validate	1		1			2
PostTweet	1		1	1	.5*	3.5
GetUserData	1	1	2	1		5
DeleteUser	1	1	1	1		4

*PostTweet only hits TrendService when a Tweet contains a hashtag. I estimate this to be around 50% of the time.

Expected load

I expect/hope to receive around 20.000 users that make an average of around 20 calls a day. This means I should be able to handle around 400.000 total requests per day. Above is a table displaying what endpoint invokes which services. However this table fails to account for the fact that a user only registers once (generally speaking). Below I will provide some estimates to adjust for this.

Register

I hope to achieve a growth of 5% so for 20.000 that would be 5000 requests per day.

DeleteUser/GetAllUserData

Not many users will care about seeing all their data, I assume only 1% of users might be interested, this would give 1000 requests per day.

For deletion I hope to have a high retention and very low active outflow so I assume 0.5% would actively erase their data, giving 500 requests per day.

PostTweet

This is the main focus and therefore I expect nearly 100% of users to use the average daily actions for this which could amount to $20.000 \times 20 = 400.000$ tweets per day.