

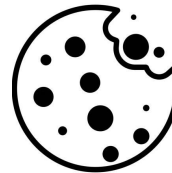


### Safe user data handling

We make sure that user data is kept secure off-site from the main website. Our database is on an entirely different server, meaning if there was a breach, your data remains secure.

## Secure Session and Cookies

When you log out, we erase your session and delete your cookie. Nothing is left behind.



### — PRO TIP —

Despite the numerous protections in place, if you don't log out an attacker can use your account. Make sure you log out before leaving your computer unattended! We can only do so much.

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Developing Secure Software  
Semester 2 Assessment 2 - UG03

# BIKES FOR REAL

A secure messaging board for bike enthusiasts



# INTRODUCTION:

Bikes for real is a forum for users to securely chat about their passion and hobby, as long as that passion/hobby is related to Bikes. We offer many security features and general user experience features, like posting, as well as editing and deleting said posts.

## SECURITY FEATURES WE OFFER:

1

### Login Protection with Sessions

•When you log in, we give your browser a secure "pass" called a session cookie. This proves who you are without having to keep sending your password.

2

### Multi-Factor Authentication(MFA):

Even if somehow, someone does manage to guess your password, they'll need to get a hold of your secure 6 digit code. Having single factor authentication is like having a bank card that doesn't need a pin - really insecure!

3

### Rate Limiting to Block Brute Force Attacks

We protect your account from hackers trying to log in by guessing your password over and over again. 5 wrong guesses within 15 minutes and they'll be blocked for a while.

4

### Session Integrity Checks

We check for any suspicious activity happens in your session, like if its location changes drastically, and log you out if anything seems wrong to stop attackers from taking your account

5

### Password Requirements

When registering, we require a minimum password length of 8 characters to make it harder to guess. We also sprinkle in some extra spices into your password on the server so it's really hard to decrypt if the data does leak.

# Further Security

## Cookie safety features

Only works over https, this means only secure connections can access it. It can't be seen by other parts of your browser.

Expires after 1 hour to keep things safe. Blocks attacks from other websites.

## Secure Website

You'll notice when accessing our website that it says https:// instead of http:// at the start of the web address. This means the website has an active certificate and proves that it's us.

## Constantly Tested

With over 90% unit test coverage, every single part of our application is thoroughly tested to ensure that it's completely secure.