

Business logic flaws

BY UNCLE RAT



Agenda

- ▶ What is it
- ▶ Impact
- ▶ Examples



What is it

<https://t.me/learningnets>



What is it

- ▶ Flawed assumptions about user behavior
- ▶ Leads to flaws in the design and implementation of the logic
- ▶ Will not be exposed by normal use of the application
- ▶ Are normally invisible
- ▶ By passing unexpected values to the server we try to induce unwanted behavior



Impact

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Impact

- ▶ Can range from trivial to critical
- ▶ Depends on the related functionality
- ▶ I.e. flawed logic in money transactions is much more impactful than flawed logic signing up for a newsletter



Examples

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Examples

- ▶ The best way is to learn by example
- ▶ <https://portswigger.net/web-security/logic-flaws/examples>
 - ▶ Client side calculations of prices in a webshop
 - ▶ Existing users return another status code from non-existing ones when user brute forcing
 - ▶ Negative amounts of items on a webshop lead to negative prices
 - ▶ If price = integer and amount = integer and total price = integer we can overflow total price when we price * amount
 - ▶ Very very long input might get cut off allowing for unintended behaviour when registering an account

