**Web treasury Testing**

*New Bank Account Number*

Author: Honti Benjamin

Supervisor: Prof László Pitlik

Date: 2025.02.24

Email: pitlik.laszlo@kodolanyi.hu, Honti.benjamin@gmail.com

# Contents

Introduction: ……………………………………………………………………………………………………………………………………1..

Problem Description: …………………………………………………………………………………………………………………………2

Issue with automated approval: …………………………………………………………………………………………………………3

Conclusion: ………………………………………………………………………………………………….……………………………………8

Copilot as a summary judge: ……………………….…………………………………………………………………………………10..

🡨the count of the dots should be optimized! :-))))

🡨it is for ever forbidden for IT-experts to work in a manual-driven way where specific automatisms are given! 😊

Tartalomjegyzék

[Contents 1](#_Toc191323749)

[Introduction 1](#_Toc191323750)

[Problem Description 2](#_Toc191323751)

[Issue with Automated Approval 2](#_Toc191323752)

[Conclusion 9](#_Toc191323753)

[Copilot as a Summary Judge 10](#_Toc191323754)

🡨Is there really all these chapters in the original (HUN) version?

# Introduction

**Web Treasury and Entering a New Bank Account Number**

In the Web Treasury system, certain payments, such as interest transfers, require entering a private bank account number.

The activation of a new account number goes through an approval process, which takes 48 hours.

This means that after entering the account number, the user must wait two days before they can use it for actual transactions.

# Problem Description

The system’s interface (**see Figure 1**) appears to ensure error-free data entry for several reasons:

* **Selecting the account type**: Users can choose the type of account from a dropdown menu, eliminating the possibility of incorrect selection.
* **Number format validation**: Like social security numbers (e.g., TAJ number), bank account numbers follow internal mathematical rules that can be verified.
* **Real-time feedback**: Online banking applications often highlight incorrectly or incompletely entered account numbers in red, preventing users from submitting data until the format is correct.

For instance, if an account number consists of **3×8 digits**, then the first **2×8 digits** are not sufficient for a valid format. Such preliminary validations aim to minimize errors. 

**Figure 1. English version** (Source: Webkincstár)

**Figure 1. Hungarian version**(Source: Webkincstár)

**New Bank Account Number Registration**

Client

**Account Type**

* Bank Account
* IBAN Domestic
* IBAN International
* Other International

**Account Name** \*
(Account Name)

☑ I declare that the owner of the above bank account number is a natural (private) person.

* Fields marked with \* are mandatory.

The boxes are also forbidden: they cause just problems in the daily work processes…

☹

# Issue with Automated Approval

The bank account numbers entered by users undergo an **approval process**, which is partly automated but may also involve manual review.

The issue arises when, **after 48 hours**, some **approved account numbers still generate error messages** (**see Figure 2**). 

**Figure 2. Hungarian version** (Source: Webkincstár)

**Figure 2. English version** (Source: Webkincstár)

**Transaction Mode**

**Select Eligible Account**

* **Bank Transfer**
* **Fund Management Between Clients**

**Error Message:
"No account number is available in the correct format! To complete a HUF transfer, please register your account number in the 'Bank Account' format under the Bank Accounts section."**

**Next**

🡨the translations should have a similar shape as the original figures… (we have to help and we might not create new problems for the Readers)

This suggests that the system’s validation process is inconsistent, as previously accepted data may later be flagged as erroneous.

**The process of entering and modifying the bank account number in the system**

* After the first account number is entered and 48 hours have passed, the user selects the only available option for interest payout: the HUF transfer (since the deposit was in HUF from the beginning).
* However, the user then encounters a dead end because no selectable account number is available, even though they can see the account number they entered 48 hours earlier under the appropriate menu (which is now supposed to be approved?).
* It is important to note that when the account number was initially entered, the user did not see the entered data in an inactive state (pending approval). Thus, they had to trust that after saving the account number, the process would proceed as expected, meaning that after 48 hours, the account number would be approved, and they could initiate an important (possibly deadline-sensitive) transfer.
* The notification in Figure 2 does not even qualify as an error message (see the "i" icon).
* The feedback stating that no appropriate account number format is available seems nonsensical at first, as an account number does exist, and the system accepted it without an error message.
* The second notification related to the HUF transfer does provide the necessary operational clarity: it explains that the domestic IBAN and the bank account number are not considered equivalent by the system, even though, from a lay user’s perspective, they contain the same information.
* Important note: Every account number, including Hungarian HUF current accounts, has an IBAN format. If a user knows this, they may believe that providing the IBAN is a more universal and informative option, just like phone numbers (e.g., 06 xx yyyyyyy vs. +36 xx yyyyyyy). The user assumes that choosing the domestic IBAN is at least as good as providing the account number.
* Additionally, even if there is a detailed user manual, an account number input interface should still be intuitive. Users should naturally understand what is correct or incorrect without extensive documentation.
* The fact that selecting a domestic IBAN for a HUF deposit does not trigger any alert initially is logical: at that moment, the system does not know why the customer is entering an IBAN-format number.
* However, neither the domestic IBAN nor the bank account type has a confirmation step regarding whether it belongs to HUF, EUR, etc. (see Figure 4).



**Figure 4.** each figure should always have a title in the final thesis 🡨-therefore in all other documents (Source: Webkincstár)

**Client**

**Account Type
Bank Account**

**Beneficiary's Account Number\*
(Beneficiary's Account Number)**

**Beneficiary's Name\*
(Beneficiary's Name)**

**Account Name\*
(Account Name)**

**☑ I declare that the owner of the above bank account number is a natural (private) person.**

* **Fields marked with \* are mandatory.**

**For security reasons, the registered bank account number can only be used 48 hours after registration.**

**Figure 4.** (Source: Webkincstár)

* After 48 unnecessary hours, the user now understands that they should not have entered a domestic IBAN, even though its information content is entirely sufficient for the system (since only the "HU" prefix needs to be removed, just like the difference between 06 and +36 in phone numbers).
* Based on the notification received during the HUF transfer attempt, the user proceeds to the account number modification menu, where:
	+ They are shocked to realize that the "modify" button only allows renaming the account, e.g., changing "account1" to "account2" (which is nearly useless unless the user made an illogical mistake when naming the account, such as naming it "primary HUF" while it belongs to a secondary EUR account).
	+ Even in such a case, deleting and re-entering the account would be a simpler solution that does not require a modification button. However, this method at least avoids an additional 48-hour approval delay, making it more user-friendly than deletion and re-entry.
	+ This user-friendliness, however, is absent when a user cannot convert a domestic IBAN entry into a simple bank account by merely removing the "HU" prefix automatically.
	+ The system designer, therefore, allows correcting a self-inflicted naming error via the modify button but forces users to register a new account and endure another 48-hour waiting period to change the format, even though IBAN and non-IBAN information are equivalent. In this case, the user did not make a mistake, unlike in the naming scenario.
	+ (Note: In 2024, the Polish consumer protection authorities fined an international parking system operator over 800,000 PLN for misleading foreign customers by providing different information in English than in Polish at parking locations. The complaints centred around the fact that a supposedly free (GRATIS) parking option still resulted in a 90 PLN fine because foreign users, misled by the English information, did not act according to the expectations of the parking operator. The operator repeatedly sent Polish-language responses without signatures to the user’s English/German complaints before eventually dropping the claim. By then, however, the issue had reached consumer protection authorities, which ruled against the company. The key lesson: No one should try to impose restrictions if they themselves are guilty of inconsistency...)
* As a result, the user is forced to register a "NEW" account and wait 48 hours, even though the only difference between the two accounts is the data format, and the account number remains the same.
* After another 48 hours, the "NEW" account is accepted.
* The transfer is finally successful.
* The user now has the same account number stored in two different formats in the system (see Figure 3).
* The user should not have had to infer the issue solely from the error message, but another user’s successful transaction screenshot made it obvious that the "HUxx" prefix, and thus the domestic IBAN status, was causing the issue.



**Figure 3.1.**: Identical Information (Source: Webkincstár)



**Figure 3.2.**: Content in Two Formats with Two \* 48-Hour Penalties (Source: Webkincstár)

**Figure 3.2.**: Content in Two Formats with Two \* 48-Hour Penalties (Source: Webkincstár)

**Bank Accounts**

**Account Name
(Bank Account Name)**

**Owner
(Account Owner)**

**Account Type
Bank Account**

**Beneficiary's Account Number
1 -0 -0**

**Beneficiary's Name
(Beneficiary's Name)**

**Eligible Bank Name
(Bank Name)**

**[Delete] [Edit]**

**[+ Register New Bank Account]**

**Figure 3.1.**: Identical Information (Source: Webkincstár)

**Bank Accounts**

**Account Name
(Bank Account Name)**

**Owner
(Account Owner)**

**Account Type
IBAN Domestic**

**Beneficiary's Account Number
HU3 -1 -1 -0 -6 -0 -0**

**Beneficiary's Name
(Beneficiary's Name)**

**Eligible Bank Name
(Bank Name)**

**[Delete] [Edit]**

**[+ Register New Bank Account]**

# Conclusion

In a potential compensation lawsuit, it would be highly interesting to see how a judge would rule. The core issue is that a **technical banking procedure** caused a **significant disadvantage** for the customer, possibly leading to financial loss. Let’s examine the arguments of the parties and the possible judicial approach.

**Plaintiff (Consumer, Customer, User)**

The customer may argue that:

* The **minimum 2 × 48-hour waiting period** placed them in a difficult situation, forcing them to pay penalties or fees.
* **The Webkincstár/Bank is responsible** for the damage since; despite **providing the correct data**, they were still unable to access their money after 48 hours.
* The banking system **automatically classified** the IBAN data into a type that resulted in **a 48-hour delay**.
* They did not receive **clear, immediate information** that the chosen setting would have such consequences.

**Defendant (Bank)**

The bank may argue that:

* **The system functions correctly**, following the pre-defined protocols.
* The customer’s **negligence** led to the problem, as they failed to select the correct type.
* The **customer’s choice** caused the 48-hour delay.
* The system is not faulty; it is **operating as intended**.

*(Is this a case of victim-blaming?)*

**Judge (Ideally, an Objective Review)**

Key judicial questions might include:

* Why **isn't the IBAN data automatically considered correct** if the system accepts it as a domestic HUF account?
* Why **isn't the system warning the user** about the 48-hour delay?
* Why **can’t the "Modify" button apply to the type**, only the alias name?
* Where was the **clear explanation** for users about type options and their consequences?
* What defines **clear communication** in this context?
* Why does the system **even allow** incorrect IBAN types for domestic HUF accounts?

**Possible Verdict**

* The case **depends on how responsibility is interpreted**.
* If the system is misleading, the bank **should take responsibility**.
* If the bank provided sufficient information, the **customer is at fault**.

**Critical Questions**

* Shouldn't the bank **design a foolproof system**?
* Why does the bank guide users into this **abnormal situation**?
* What about **90+ year-old customers**?
* Why **can't the type be modified instantly**?

**And the key issue:**

* If the bank **has no strong justification**, it **should lose** the case.
* Enforcing the type of restriction **is acceptable**, but
* **Imposing a 48-hour penalty seems arbitrary**.

Copilot as a Summary Judge
**Prompt:**
*Based on the attached text, who is in the right: the customer (plaintiff) or the bank (defendant)?*

**Copilot’s Response:**
Based on the attached text, the customer's (plaintiff's) position appears to be more substantiated. The customer argues that due to a system error and inadequate communication, they were unable to complete their transaction on time, resulting in financial loss.

The following points support the customer's claim:

1. **Automated System Failure:**
Despite entering the correct details, the system did not allow the transaction to be processed even after 48 hours, indicating a failure in the system. A financial system should ensure prompt and accurate processing, especially when the user provides valid information.
2. **Lack of Proper Communication:**
The customer did not receive clear and unambiguous information that the domestic IBAN format was not suitable for HUF transfers. The system should have explicitly warned the user at the time of input that the selected format would not allow the transaction to be processed. A well-designed system provides clear warnings and instructions to prevent such issues.
3. **Poor User Experience and Lack of Intuitiveness:**
The system did not provide an intuitive interface for entering account details, failing to make the difference between IBAN and a traditional account number clear. This created a misleading situation for the user. In digital financial systems, seamless and straightforward user experience should be a fundamental requirement.
4. **Limited Modification Options:**
The system did not allow the IBAN format to be easily modified to a standard account number, resulting in an unnecessary 48-hour delay. This restriction is unreasonable, as there is no technical justification for preventing the user from immediately correcting the input. The “modification” function was not only restricted but effectively useless since it did not cover the most critical parameters.

**Additional Considerations:**

* The bank's responsibility extends beyond merely operating its system; it must also ensure that all customers, including those with limited digital literacy, can use it effectively.
* A user-friendly system should accommodate not only visually impaired users (as required by accessibility standards) but also elderly customers and those unfamiliar with online banking.
* The issue is not only technical but also legal and ethical: bank-designed systems should be "foolproof," especially when financial risks are involved.

**Conclusion:**
The bank’s (defendant's) argument that the system operated flawlessly, and that the customer’s negligence caused the issue does not seem well-founded, as the system failed to provide adequate communication and usability.

Overall, the customer's position appears stronger, as the issue arose from system deficiencies and poor communication rather than user negligence.

**References**

[1] [IBAN Kalkulátor: Számítsa ki az IBAN-t a Bank kódjából és a számlaszámból](https://www.iban.hu/calculate-iban)

[2] [Magyarország IBAN-formátum és példa - Wise](https://wise.com/hu/iban/hungary)

[3] [SWIFT kód, IBAN szám, BIC kód: minden tudnivaló](https://biztosdontes.hu/cikkek/swift-kod-iban-szam-bic-kod)

[4] [IBAN Checker: Érvényesítse és ellenőrizze az IBAN számokat](https://www.iban.hu/iban-checker)