

Gomes Bank System

Functional requirements

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| | Login | <ul style="list-style-type: none">• Staff will be able to enter their CPF and password in order to access the system. |
| | Logout | <ul style="list-style-type: none">• Will have an option to logout.• Ask for a confirmation.• When clicked, the login screen will appear. |
| | Add a new staff | <ul style="list-style-type: none">• Will have an option to add a new staff.• will be required full name, CPF, email, address, phone number, birthday, sector and password.• Ask for confirmation before adding. |
| | Block a staff | <ul style="list-style-type: none">• Will have an option to block the staff• Will be required the staff's CPF, the reason why the staff is being blocked.• Show all information about the staff.• Ask for confirmation before blocking. |
| | Unlock a staff | <ul style="list-style-type: none">• Will have an option to unlock the staff• Will be required the staff's CPF, the reason why the staff is being unlocked.• show all information about the staff• Ask for confirmation before unlocking. |
| | Change staff info | <ul style="list-style-type: none">• Will have an option to change the staff's information.• Will be required the staff's CPF and the current staff's password in order to confirm the change, the reason why the staff's information is being changed.• Will be shown all information and just some of them will be allowed to change. To change just delete the information displayed and put the new information.• Ask for confirmation before changing. |

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| | Search staff | <ul style="list-style-type: none"> • Will have an option to search a staff. • Will be required CPF. |
| | Add a new customer & account | <ul style="list-style-type: none"> • Will have an option to add a new customer. • will be required full name, CPF, email, address, phone number, birthday, email, amount and the account's password. • Ask for confirmation before adding. |
| | Block customer & account | <ul style="list-style-type: none"> • Will have an option to block the customer/account • Will be required the customer's CPF, the Reason why the customer/account is being blocked. • Show all information about the customer and account number and ask for confirmation before blocking. • Show a message if the action was done or not. |
| | Unlock customer & account | <ul style="list-style-type: none"> • Will have an option to unlock the customer/account • Will be required the customer's CPF, the reason why the customer/account is being unlocked. • Show all information about the customer and ask for confirmation before unlocking. |
| | Change customer information | <ul style="list-style-type: none"> • Will have an option to change the customer's information. • Will be required the staff's CPF and the current staff's password in order to confirm the change, the reason why the staff's information is being changed. • Will be shown all information and just some of them will be allowed to change. To change just delete the information displayed and put the new information. • Ask for confirmation before changing. |
| | Search customer/account | <ul style="list-style-type: none"> • Will have an option to search a customer or account. • Will be required CPF. |
| | Check balance | <ul style="list-style-type: none"> • Will have an option to perform a deposit. • Will be required the customer's CPF. |

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| | Deposit | <ul style="list-style-type: none"> • Will have an option to perform a deposit. • Will be required the depositor's name, CPF, favoured account number and amount. • Ask for confirmation before performing the deposit. |
| | Transfer | <ul style="list-style-type: none"> • Will have an option to perform a transfer. • To the customer who will make the transfer will be required the customer's name, CPF, account number, amount and password. • To the customer who will receive the money will be required his/her name, CPF and account number. • Ask for confirmation before performing the transaction. |
| | Withdrawal | <ul style="list-style-type: none"> • Will have an option to perform the withdrawal. • Will be required the customer's CPF, account number, the amount and password.. • Ask for confirmation before performing the withdrawal. • Show a message if the account has no money. |
| | Loan | <ul style="list-style-type: none"> • Will have an option to perform the loan. • Will be required the customer's CPF and amount, installment plan, fees(%) a.m, payment day and customer's password. • Ask for confirmation before performing the action. |
| | Pay loan | <ul style="list-style-type: none"> • Will have an option to perform the loan. • Will be required payer's name and CPF and loan receipt key. • Ask for confirmation before performing the action. |
| | Search loan | <ul style="list-style-type: none"> • Will have an option to search all loans. • Will be required payer's name and CPF. • All loans receipts will be appear and to see information about a specific, click on some receipt key. |
| | About | <ul style="list-style-type: none"> • Will have an option to see information about the program and about the bank. |
| | Support | <ul style="list-style-type: none"> • Will have an option to send a message to the support. |

Non-functional requirements

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| | Login | <ul style="list-style-type: none">• Check if CPF and password given is correct.• Warn the staff by showing a message if the staff already entered the wrong login information twice and show a message if the next attempt is wrong the staff will be blocked.• IF enter the wrong CPF and/or password 3 times, the staff will be blocked and save all information into the database.• Check if the staff is blocked.• Check if the staff exist.• Show an error message to all options above. |
| | Add a new staff | <ul style="list-style-type: none">• Check if the CPF already exist, if exist, show a message.• Check if the password and confirm password match, if they don't show an error message.• Only add if all information were entered, show a message to warn about that.• Put into the database the staff's id who added a new one, full date, the all typed information about the new staff.• Show a message when the operation is done. |
| | Block a staff | <ul style="list-style-type: none">• Show an error message if the CPF does not exit.• Preventing an attendant from blocking a manger, from blocking him/herself and from blocking a staff who is already blocked.• Show a message when the operation is done and clean all fields.• Clean all fields when change the CPF.• Only enable the block button when some text is typed.• Put into the database the blocked staff's id, full date, the staff's id who blocked and the reason.• Add by 1 the number of times the staff was blocked.• Show a message when the operation is done. |
| | Unlock a staff | <ul style="list-style-type: none">• Show an error message if the CPF does not exit.• Preventing an attendant from unlocking a manger, from unlocking him/herself and from unlocking a staff who is already unlocked.• Show a message when the operation is done.• Only enable the unlock button when some text is typed.• Clean all fields when change the CPF. |

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| | | <ul style="list-style-type: none"> • Put into the database the unlocked staff's id, full date, the staff's id who unlocked and the reason. • Show a message when the operation is done. |
| | Change staff info | <ul style="list-style-type: none"> • Show an error message if the CPF does not exist. • Check if the current password match. • Check if the new password and confirm password match, if they don't, show an error message. • Preventing an attendant from changing a manager, from changing him/herself. • Only enable the change button when some text is typed. • Clean all fields when change the CPF. • All fields will be shown as they are in the database. • Put into the database the staff's id who made the changes, full date, staff's id who had his information changed, which changes were made. • Show a message when the operation is done. |
| | Search staff | <ul style="list-style-type: none"> • Show an error message if the CPF does not exist. • Show all information about the staff except password. • Clean all fields when change the CPF. |
| | Add a new customer & account | <ul style="list-style-type: none"> • Check if the CPF already exist, if exist, show a message. • Check if the password and confirm password match, if they don't show an error message. • Only add if all information were entered, show a message to warn about that. • Generate a receipt key. • Put into the database the staff's id who added the customer/account, full date, the all typed information about the new customer, the opening account receipt. • Show a message when the operation is done. • Print the opening account receipt. |
| | Block a customer & account. | <ul style="list-style-type: none"> • Check if the given information is correct. • Preventing from blocking a customer/account already blocked. • Put into the database the blocked customer's id, full date, the staff's id who blocked and the reason, count the number of times the customer/account were blocked. • If the customer were blocked his/her account will be as well and vice versa. |

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| | | <ul style="list-style-type: none"> • Show a message when the operation is done and clean all fields. • Clean all fields when change the CPF. • Only enable the block button when some text is typed. |
| | Unlock a customer & account. | <ul style="list-style-type: none"> • Show an error message if the CPF does not exist. • Preventing from unlocking a customer/account already unlocked. • Show a message when the operation is done. • Only enable the unlock button when some text is typed. • Clean all fields when change the CPF. • Put into the database the unlocked staff's id, full date, the staff's id who unlocked and the reason. • Show a message when the operation is done. |
| | Change customer information | <ul style="list-style-type: none"> • Show an error message if the CPF does not exist. • Check if the current password match. • Check if the new password and confirm password match, if they don't, show an error message. • Only enable the change button when some text is typed. • Clean all fields when change the CPF. • All fields will be shown as they are in the data base. • Put into the database the staff's id who made the changes, full date, customer's id who had his information changed, which changes were made. • Show a message when the operation is done. |
| | Search customer/account | <ul style="list-style-type: none"> • Show an error message if the CPF does not exist. • Show all information about the customer and account except password. • Clean all fields when change the CPF. |
| | Check balance | <ul style="list-style-type: none"> • Show an error message if the CPF does not exist. • Denied if customer/account is blocked. |
| | Deposit | <ul style="list-style-type: none"> • Show an error message if the CPF does not exist, account doesn't exist, value is in a wrong format. • Show name, CPF, account number of the destination account. • Denied if customer/account is blocked. • Print the deposit receipt which must have the following information: <ul style="list-style-type: none"> ◦ Bank's name on the very top ◦ Depositor's name. |

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| | | <ul style="list-style-type: none"> ○ Depositor' CPF. ○ Destination account information ○ Full date ○ Amount ○ Receipt key ○ Staff's name • Put into the database receipt key, customer's id, account number, amount, full date. |
| | Transfer | <ul style="list-style-type: none"> • Check if the given information are correct. • Check if the account has enough money. • Preventing from transfer to the same account. • Show message error for each wrong information. • The transfer voucher must have the following • Denied if from or to customer/account are blocked. information: <ul style="list-style-type: none"> ○ Bank's name on the very top ○ From customer's name ○ CPF ○ Account information ○ Full date ○ Amount ○ To customer' name ○ CPF ○ A unique number to identify this transfer voucher. ○ Staff's name • Show a message if the action was done or not. <p>Put into the database from: name, CPF, account, amount. TO: name, CPF, account, full date, transfer voucher key.</p> |

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| Withdrawal | <ul style="list-style-type: none"> • Check if the given information are correct and the account has enough money. • IF they match and have enough money, perform the action. • Error message if the information don't match or if the account doesn't have enough money • Denied if customer/account is blocked. • The withdrawal receipt must have the following information: <ul style="list-style-type: none"> ◦ Bank's name on the very top ◦ Customer' name ◦ CPF ◦ Account information ◦ Full date ◦ Amount ◦ A unique number to identify this withdrawal receipt ◦ Staff's name • Put into the database the withdrawal receipt key, customer's id, account number, amount, full date. |
| Loan | <ul style="list-style-type: none"> • Check if both CPF and password are correct, show an error message if they don't. • Denied if customer/account is blocked. • The minimum value to request will be R\$ 1000.00 • The maximum payment installment will be 99. • Fees and amount per month will be calculated automatically. • The fees will have a fixed values, but will have an increase for each time the customer was blocked. • A message will appear if the loan was approved or not and why. • Print the loan receipt which must contain: <ul style="list-style-type: none"> ◦ Bank's name on the very top ◦ Name ◦ CPF ◦ Account ◦ Fees ◦ Amount per month ◦ Payment installment ◦ Payment day ◦ Loan date ◦ Responsible staff ◦ Receipt key |

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| | | <ul style="list-style-type: none"> Put into the database all necessary information to identify the customer, loan and staff. |
| | Pay loan | <ul style="list-style-type: none"> Check If the loan receipt key is valid. Show the principal information about the loan. Show error message if the information are either wrong or if some of them was forgotten. Print a payment loan which must contain: <ul style="list-style-type: none"> Bank's name on the very top Name CPF Amount paid payment day responsible staff receipt key Save all information about the payment in a database |
| | Search loan | <ul style="list-style-type: none"> Check if the CPF is valid. Show name, CPF, account, amount, installments, installments paid, fees, amount per month, payday, loan quantity, payer's name, cpf, receipt key, payment day, on time. |
| | Support | <ul style="list-style-type: none"> When send the message, send as well the responsible staff id, full date. Only enable the block button when some text is typed. Put all these information into the database |