

## KRATKO UPUTSTVO ZA UPOTREBU APLIKACIJE KASA-STOLOVI.EXE I POSTGRESQL BAZE PODATAKA SHORT INSTRUCTIONS FOR USING THE KASA-STOLOVI.EXE APPLICATION AND THE POSTGRESQL DATABASE

Funkcija Aplikacije KASA-STOLOVI.EXE i pratećeg servisnog programa za PostgreSQL bazu podataka KASA-STOLOVI-DATABASE.EXE

Ova aplikacija je redukovana poslovna aplikacija za elektronsku fiskalnu registar kasu u restoranu. Kasa upravlja prodajom hrane i pića i izdaje fiskalne račune gostima restorana (kupcima).

Ova aplikacija pisana je u Alaska Xbase++ 2.0 i eXpress++ 2.0 programskom jeziku i radi sa PostgreSQL serverom baze podataka preko PGDBE.DLL mašine. Ne koristi PGDBE UPSIZE tehnologiju već koristi samo PGDBE tehnologiju. Korišćen je PostgreSQL server verzija 9.4 i sve novije verzije.

Program za kreiranje i održavanje PostgreSQL baze podataka priložen je kao eksterna EXE aplikacija pod nazivom KASA-STOLOVI.EXE

Program za dizajn i raspored stolova u objektu restorana KASA-DESIGN.EXE nije priložen

Iz aplikacije je izostavljen deo koji se bavi formiranjem fiskalnog računa i slanjem fiskalnog računa na restful web servis poreske uprave koja vrši fiskalizaciju računa i vraćanje fiskalizovanog računa nazad u fiskalnu registar kasu odakle se on štampa i izdaje kupcu.

Ovaj deo nije univerzalan i zavisi od postojećih propisa u svakoj državi. Zavisi i od restful web servisa (softver) koji su sviđa različiti

Izostavljen je i deo koda za štampanje fiskalnog i nefiskalnog računa. Izostavljen je i deo koda za štampanje naloga kuhinji i naloga šanku.

Ostavljen je samo interfejs za formiranje računa za gosta restorana sve do faze pred slanje tog računa na restful web servis na fiskalizaciju.

Izostavljen je sav kod za izdavanje izveštaja o prodaji za dan i za period. Izostavljen je sav kod za konfiguraciju i podešavanje rada kase preko INI fajlova

Function Application KASA-STOLOVI.EXE and accompanying service program for the PostgreSQL database KASA-STOLOVI-DATABASE.EXE

This application is a reduced business application for electronic fiscal cash register in a restaurant. The cash register manages food and drink sales and issues fiscal bills for restaurant guests (customers).

This application is written in Alaska Xbase++ 2.0 and eXpress++ 2.0 programming language and works with the PostgreSQL database server through the PGDBE.DLL engine. It does not use PGDBE UPSIZE technology but only uses PGDBE technology. PostgreSQL server version 9.4 and all newer versions were used.

A program for creating and maintaining a PostgreSQL database is attached as an external EXE application named: KASA-STOLOVI.EXE

Program for design and arrangement of tables in restaurant KASA-DESIGN.EXE is not attached

The part dealing with creation of a fiscal bill has been omitted from application and by sending fiscal bill to the restful web service of tax administration that performs fiscalization of bill and returning the fiscalized bill back to the fiscal one cash register from where it is printed and issued to the customer.

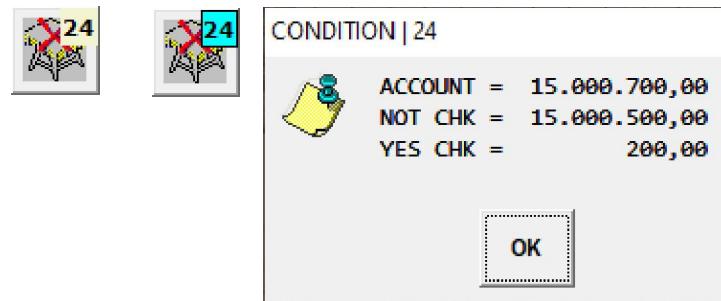
This part is not universal and depends on existing regulations in each country. It also depends on restful web services (software), which are all different Part of code for printing fiscal and non-fiscal bills has also been omitted. Part of code for printing orders to kitchen and orders to bar was also omitted.

Only the interface for creating an bill for the guest of the restaurant is left to the stage before sending that bill to restful web service for fiscalization.

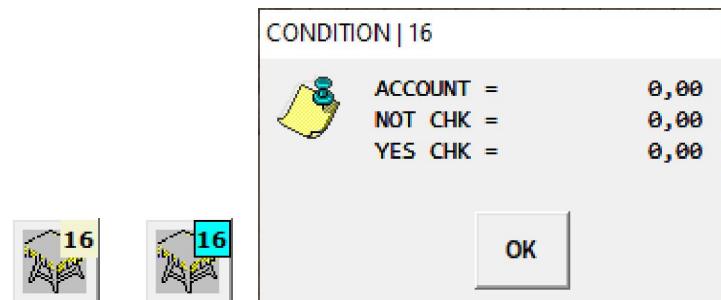
All code for issuing sales reports for the day and for the period is omitted. All the code for configuring and setting up the cash register via INI files has been omitted

**1. startuješ aplikaciju KASA-STOLOVI.EXE | 1. start the KASA-STOLOVI.EXE application**

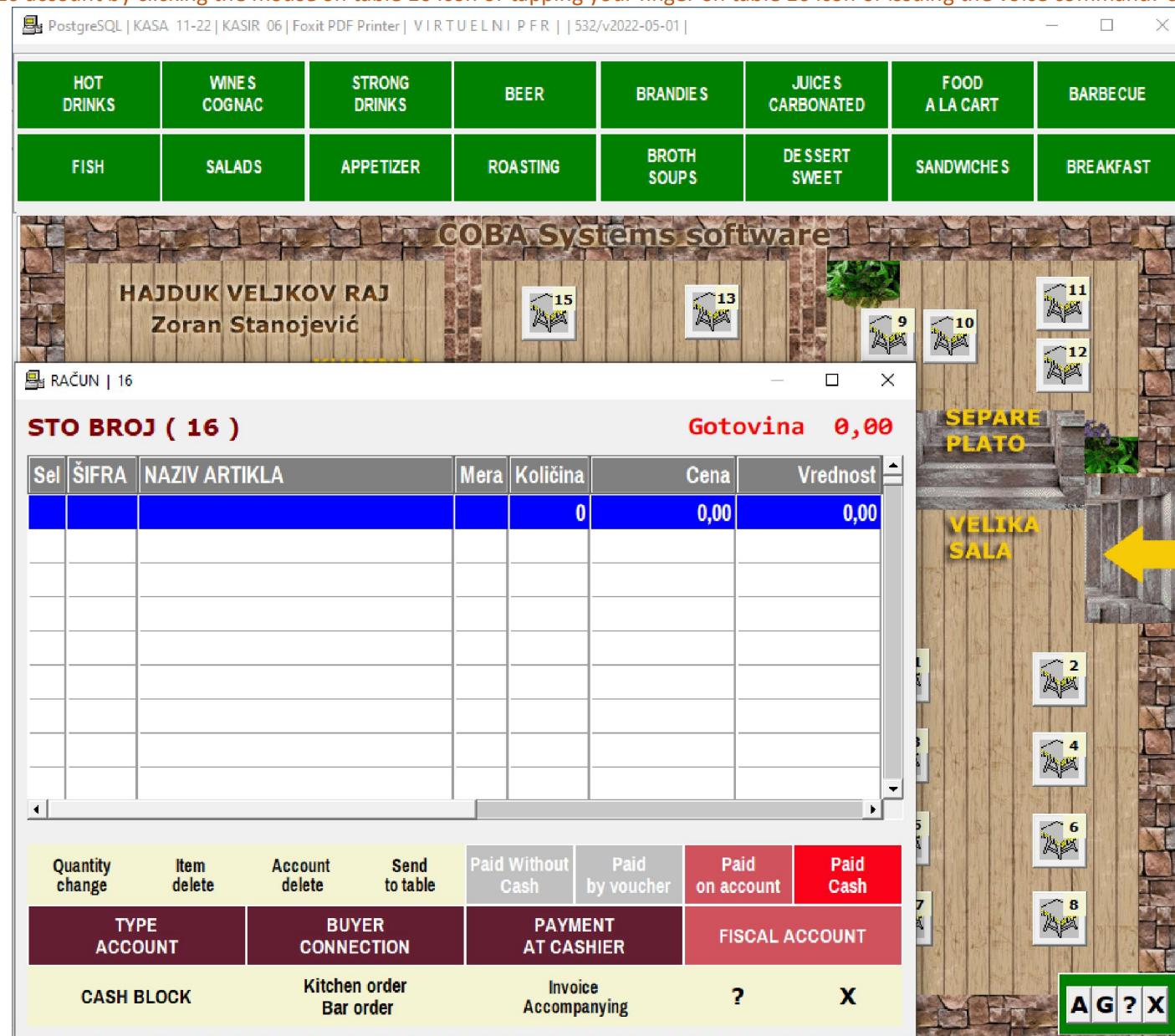
2. ovo je zauzet sto (račun stola ima stavke na računu) | this is a busy table (the table account has items on the account)



3. ovo je slobodan sto (račun stola je prazan) | this is a free table (table account is empty)



4. Otvoriš račun stola 16 tako što klikneš mišem na ikonu stola 16 ili tapneš prstom na ikonu stola 16 ili izdaš glasovnu komandu: 'sixteenth'  
 4. You open table 16 account by clicking the mouse on table 16 icon or tapping your finger on table 16 icon or issuing the voice command: 'sixteenth'



5. Otvoriš listu grupu artikala BARBECUE klikom na dugme BARBECUE ili na taster F8 ili tap prstom ili izdaš glasovnu komandu: 'barbecue muda'

5. Open list of BARBECUE articles by clicking on the BARBECUE button or on the F8 key or tap with your finger or issue the voice command: 'barbecue muda'

The screenshot shows the COBA System POS software interface. At the top, there is a menu bar with options like PostgreSQL, KASA 11-22, KASIR 06, Foxit PDF Printer, VIRTUELNI PFR, and version 532/v2022. Below the menu, there is a grid of categories: HOT DRINKS (Wines, Cognac), STRONG DRINKS, BEER, FISH, SALADS, APPETIZER, and ROASTING. The main area displays a list of barbecue articles with columns for Article Name, JMR, Code, and Price. At the bottom, there are buttons for quantity change, item delete, account delete, send to table, paid without cash, paid by voucher, paid on account, paid cash, type account, buyer connection, payment at cashier, fiscal account, cash block, kitchen order, bar order, invoice accompanying, and various status indicators (green checkmark, red warning, red X).

ARTICLE NAME	JMR	CODE	PRICE
BRIZLE NA ŽARU 300g	KOM	01036	100,00
CARSKA REBRA NA ŽARU; 300	KOM	01016	100,00
CREVCA NA ŽARU 300g	KOM	01037	100,00
ĆEVAPČIĆI GURMANSKI; 400g	KOM	01003	100,00
ĆEVAPČIĆI LESKOVAČKI; 300	KOM	01004	100,00
ĆEVAPČIĆI SARAJEVSKI; 300	KOM	01005	100,00
JUNEĆA DŽIGERICNA NA ŽARU	KOM	01030	100,00
KOBASICA DOMAĆA; 400g	KOM	01010	100,00
KRMENADLA GURMANSKA; 400g	KOM	01014	100,00
KRMENADLA NA TIGANJU; 400	KOM	01015	100,00
KRMENADLE NA ŽARU; 300g	KOM	01013	100,00
PILEĆA DŽIGERICNA NA ŽARU;	KOM	01021	100,00
PILEĆA DŽIGERICNA U SLANIN	KOM	01020	100,00
PILEĆI RAŽNJIĆ NA CIGANSK	KOM	01022	100,00
PILEĆI RAŽNJIĆ U SLANINIC	KOM	01019	100,00
PILEĆI RAŽNJIĆ; 200g	KOM	01018	100,00
PILEĆI STEK GURMANSKI; 20	KOM	01012	100,00
PLJESKAVICA GURMANSKA; 40	KOM	01001	100,00

6. izabereš stavku u listi artikala i klikneš mišem ili prstom ili Enter ili Dugme i ona se prenese u račun stola

6. you select an item in list of articles and click with your mouse or finger or Enter or Button on item and it is transferred to table account

The screenshot shows a POS system interface with two main windows:

- Left Window (Main Screen):**
  - Header: PostgreSQL | KASA 11-22 | KASIR 06 | Foxit PDF Printer | VIRTUALNI PFR | 532/v2022
  - Category Grid: HOT DRINKS, WINES COGNAC, STRONG DRINKS, BEER, FISH, SALADS, APPETIZER, ROASTING.
  - Background Image: COBA System logo and text: HAJDUK VELJKOV RAJ Zoran Stanojević.
  - Text: RAČUN | 16
  - Section: STO BROJ ( 16 )
  - Table: Shows a row for item 01036: BRIZLE NA ŽARU 300g, Mera: KOM, Količina: 1. A modal dialog box is overlaid on this row, asking for quantity change, with the value 1,000 entered.
  - Bottom Row Buttons: Quantity change, Item delete, Account delete, Send to table, Paid Without Cash, Paid by voucher, Paid on account, Paid Cash.
  - Bottom Row Labels: TYPE ACCOUNT, BUYER CONNECTION, PAYMENT AT CASHIER, FISCAL ACCOUNT.
  - Bottom Row Buttons: CASH BLOCK, Kitchen order Bar order, Invoice Accompanying, ?, X.
- Right Window (Item Catalog):**
  - Header: PostgreSQL | KASA 11-22 | ARTIKLI 25
  - Title: BARBECUE
  - Table: List of barbecue-related items with columns: ARTICLE NAME, JMR, CODE, PRICE.
  - Items listed (partial list):
 

BRIZLE NA ŽARU 300g	KOM	01036	100,00
CARSKA REBRA NA ŽARU; 300	KOM	01016	100,00
CREVCA NA ŽARU 300g	KOM	01037	100,00
ĆEVAPČIĆI GURMANSKI; 400g	KOM	01003	100,00
ĆEVAPČIĆI LESKOVAČKI; 300	KOM	01004	100,00
ĆEVAPČIĆI SARAJEVSKI; 300	KOM	01005	100,00
JUNEĆA DŽIGERICA NA ŽARU	KOM	01030	100,00
KOBASICA DOMAĆA; 400g	KOM	01010	100,00
KRMENADLA GURMANSKA; 400g	KOM	01014	100,00
KRMENADLA NA TIGANJU; 400	KOM	01015	100,00
KRMENADLE NA ŽARU; 300g	KOM	01013	100,00
PILEĆA DŽIGERICA NA ŽARU;	KOM	01021	100,00
PILEĆA DŽIGERICA U SLANIN	KOM	01020	100,00
PILEĆI RAŽNJIĆ NA CIGANSK	KOM	01022	100,00
PILEĆI RAŽNJIĆ U SLANINIC	KOM	01019	100,00
PILEĆI RAŽNJIĆ; 200g	KOM	01018	100,00
PILEĆI STEK GURMANSKI; 20	KOM	01012	100,00
PLJEŠKAVICA GURMANSKA; 40	KOM	01001	100,00
  - Bottom Row Buttons: ✓, Name F2, Code F3, Word F4, Barcod F5, Catalog F6.
  - Bottom Row Labels: Supplier F7, Links F8, Descript F9, Article F10, !, X.

**7.** upišeš količinu I POTVRDIŠ SA ENTER ili potvrдиš količini 1 sa ENTER ili sa ESC

8. sa ESC zatvoriš listu artikala BARBEQUE (neće se zatvoriti sama posle preuzimanja artikla u račun), sa sledećim ESC zatvoriš račun stola

7. enter quantity AND CONFIRM WITH ENTER or confirm quantity 1 with ENTER or with ESC

8. close list of BARBEQUE items with ESC (it will not close by itself after downloading the article to account), close table account with next ESC

## 9. Kad otvoriš račun stola, tada sa komandnim dugmadima

9. When you open the table account, then with the command buttons

Quantity change	Item delete	Account delete
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- menjaš količinu selektovane stavke | you change the quantity of the selected item

- brišeš selektovanu stavku | you delete the selected item

- brišeš sve stavke iz računa | delete all items from the account

Ostala komandna dugmad su isključena – ne rade | other command buttons are disabled - they don't work

## 10. Stealt tasters:

**Taster (space)** aktivira dialog box za upis šifre artikla, ako je konobar zna da ne gubi vreme otvarajući odgovarajuću listu artikala i birajući artikal iz te liste

**Key (space)** activates a dialog box for entering code of the article, if the waiter knows it, he does not waste time opening corresponding list of articles and choosing an article from that list

**Taster (TAB)** menja količinu selektovane stavke | The (TAB) key changes quantity of selected item

**Taster (C)** menja cenu selektovane stavke | The key (C) changes price of selected item

### ČEKIRANJE - SELEKCIJA

**Taster (ENTER)** ili Dupli klik mišem na stavku računa: selektuje/deselektuje stavku

### CHECKING-SELECTION

**Key (ENTER)** or Double mouse click on account item: selects/deselects item

- sabiraju se i štampaju se samo neselektovane stavke | only unselected items are collected and printed

- selektovane stavke nisu u igri | the selected items are not in the game

- odštampane stavke automatski se selektuju kako se ne bi moglo ponovo štampati  
printed items are automatically selected so they cannot be reprinted

**Taster (Q)** deselektuje sve stavke na računu | The (Q) key deselects all items on the account

**Taster (Alt)+(Q)** selektuje sve stavke na računu | The key (Alt)+(Q) selects all items on the account

11. sabiraju se i štampaju se samo neselektovane stavke | only unselected items are collected and printed

NE ČEKIRANO – NE SELEKTOVANO

NOT CHECKED – NOT SELECTED

RAČUN-ACCOUNT | 24

**STO-TABLE ( 24 )**

**NO CHECK**

**Cash 15.000.600,00**

CHK	CODE	ARTICLE NAME	UOM	QUANTITY	PRICE	AMOUNT
	00061	RAKIJA LOZOVACA GRAPA UVOD	KOM	1000	15.000,00	15.000.000,00
	00031	KONJAK COURVOISIER	KOM	1	100,00	100,00
	01023	PILEĆE BELO ROLOVANO; 400	KOM	1	100,00	100,00
	02020	TOPLA ČOKOLADA 0,2	KOM	1	100,00	100,00
	02001	HLEB KRIŠKA; 30g	KOM	1	100,00	100,00
	02001	HLEB KRIŠKA; 30g	KOM	1	100,00	100,00
	01019	PILEĆI RAŽNJIĆ U SLANINIC	KOM	1	100,00	100,00

Quantity change    Item delete    Account delete    Send to table    Paid Without Cash    Paid by voucher    Paid on account    Paid Cash

TYPE ACCOUNT	BUYER CONNECTION	PAYMENT AT CASHIER	FISCAL BILL
CASH BLOCK	Kitchen order Bar order	Invoice Accompanying	?

12. Ne sabiraju se i ne štampaju se neselektovane stavke | unselected items NOT collected and printed

ČEKIRANO – SELEKTOVANO

CHECKED – SELECTED

RAČUN-ACCOUNT | 24

**STO-TABLE ( 24 )**

**CHECK**

**▼ Cash 500,00**

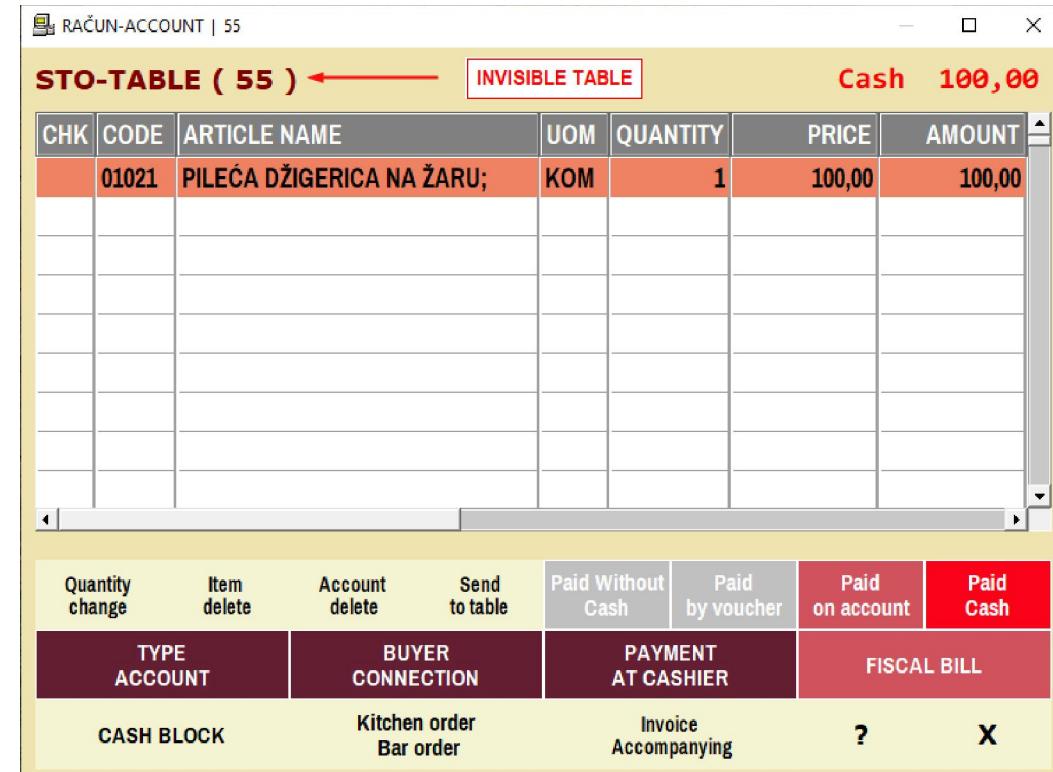
CHK	CODE	ARTICLE NAME	UOM	QUANTITY	PRICE	AMOUNT
<input checked="" type="checkbox"/>	00061	RAKIJA LOZOVACA GRAPA UVOD	KOM	1000	15.000,00	15.000.000,00
<input checked="" type="checkbox"/>	00031	KONJAK COURVOISIER	KOM	1	100,00	100,00
	01023	PILEĆE BELO ROLOVANO; 400	KOM	1	100,00	100,00
	02020	TOPLA ČOKOLADA 0,2	KOM	1	100,00	100,00
	02001	HLEB KRIŠKA; 30g	KOM	1	100,00	100,00
	02001	HLEB KRIŠKA; 30g	KOM	1	100,00	100,00
	01019	PILEĆI RAŽNJIĆ U SLANINIC	KOM	1	100,00	100,00

Quantity change   Item delete   Account delete   Send to table   Paid Without Cash   Paid by voucher   Paid on account   Paid Cash

TYPE ACCOUNT	BUYER CONNECTION	PAYMENT AT CASHIER	FISCAL BILL
CASH BLOCK	Kitchen order Bar order	Invoice Accompanying	? X

**13.** NEVIDLJIVI STOLOVI su svi oni stolovi koji nisu putem KASA-DESIGN.EXE programa postavljeni u objekat restorana

**13. INVISIBLE TABLES** are all those tables that are not placed in the restaurant room through the KASA-DESIGN.EXE program.



**Button INVISIBLE TABLES**  
**Mouse Left Button Click or**  
**finger tap, and entry of the**  
**table number:**

BROJ STOLA 1-100

**Aplikacija može da koristi bilo koji od nevidljivih restoranskih stolova (stealt stolovi) na prikazani način**

The CASH-TABLES.EXE application can work with 100 restaurant tables. If the restaurant room can accommodate 30 tables, then 70 tables will not be visible. The application can use any of the invisible restaurant tables (stealth tables) as shown

#### 14. ARTIKLI - upis artikala u šifarnik artikala, brisanje artikala iz šifarnika artikala i izmena podataka artikala vrši se u šifarniku artikala

14. ARTICLES - entry of articles into article code book, deletion of articles from article code book and modification of article data is done in the article code book



Articles code book is sorted by article name by default

**ARTICLES CODE BOOK**

SQL TABLE

ARTICLE NAME	UOM	CODE	PRICE
10:AVANS (Đ)		10000	1,00
11:AVANS (E)		11000	1,00
12:AVANS (G)		12000	1,00
13:AVANS (A)		13000	1,00
BELI LUK MLADI KOM	KOM	02007	100,00
BRANDY BADEL	KOM	00033	100,00
BRANDY MARTELL	KOM	00034	100,00
BRANDY STOCK 84	KOM	00032	100,00
BRIZLE NA ŽARU 300g	KOM	01036	100,00
CARSKA REBRA NA ŽARU; 300	KOM	01016	100,00
COCACOLA LIMENKA 0,25	KOM	00301	100,00
COCACOLA STAKLO 0,25	KOM	00302	100,00
COCTA STAKLO 0,25	KOM	00303	100,00
CREVCA NA ŽARU 300g	KOM	01037	100,00
ČORBA TELEĆI BUJONES 300g	KOM	02024	100,00
ČEVAPČIĆI GURMANSKI; 400g	KOM	01003	100,00
ČEVAPČIĆI LESKOVAČKI; 300	KOM	01004	100,00
ČEVAPČIĆI LUSKOVACI 300	KOM	01005	100,00

**ARTICLE INSERT** **ARTICLE DELETE** **ARTICLE DESCRIPT** **ARTICLE CARD** **Exit**

**ARTICLE REGISTER CARD**

Article Code   Šifra artikla	01016	GROUP H-P
Article Type   Tip artikla	H	
Article Name   Naziv artikla	CARSKA REBRA NA ŽARU; 300	
Long Article name   Dugački Naziv artikla:		
BarCode   Barkod	0101600000001	
Catalog Number   Kataloški broj		
Reference for Link   Referenca na vezu	116	
Group Article 1-16   Grupa artikala 1-16	8	GROUP 1-16
Unit Of Measurement   Jedinica mere	KOM	
Tarifa (internal)   Tarifa (interno)		
VAT rate in %   Stopa poreza u %	0,0	
Sort article   Vrsta artikla   R,P,M,U,K	P	
Retail Price   Cena maloprodajna	100,00	
Foreign currency Price   Cena devizna	0,00	
Quantity in stock   Zalihe	-4,000	
Expiration date   Rok trajanja	22.03.2023	

**OK** **Edit** **Help** **Exit**

**15. GRUPE ARTIKALA** - podjela artikala na grupe, odnosno svrstavanje artikala u grupe, vrši se iz programa za grupe artikala

**15. GROUPS OF ARTICLES** - division of articles into groups, i.e. classification of articles into groups, is done from program for groups of articles



Group of Articles code book is sorted by GROUP by default

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Sorting Filtering

**GROUPS OF ARTICLES**

SQL TABLE

H-FOOD	GROUP	CODE	ARTICLE NAME
P-DRINK	1-16	13000	13:AVANS (A)
		12000	12:AVANS (G)
		11000	11:AVANS (E)
		10000	10:AVANS (D)
P	1	02017	NES KAFA
C	1	00101	KAMEL
P	1	02022	ZELENI ČAJ BILJNI ČAJ 0,3
P	1	02013	KISELA VODA VELIKA 1,0
P	1	02012	VOĐA IZVORSKA MALA 0,33
P	1	02020	TOPLA ČOKOLADA 0,2
P	1	02016	KAFA TURSKA TRADICIONALNA
P	1	02018	ESPRESSO KAFA
P	1	00316	VODA ROSA STAKLO 0,25
P	1	02011	VOĐA IZVORSKA VELIKA 1,0
P	1	02015	KAFA SRPSKA TRADICIONALNA
P	1	02014	KISELA VODA MALA 0,33
H	10	01074	SALATA DOMAĆI AJVAR 300g
			SALATA OD SVEŽEG KURUGLA

QUICK CHANGE GROUPS OF ARTICLES

ARTICLE INSERT ARTICLE DELETE ARTICLE DESCRIPT ARTICLE CARD Catalog F6

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Sorting Filtering

**GROUPS OF ARTICLES**

SQL TABLE

QUICK DATA ENTRY

Group: H-Food, P-Drink

Group article 1 - 16

Barcode article

Retail price

Stock

OK

P	1	02020	TOPLA ČOKOLADA 0,2
P	1	02016	KAFA TURSKA TRADICIONALNA
P	1	02018	ESPRESSO KAFA
P	1	00316	VODA ROSA STAKLO 0,25
P	1	02011	VOĐA IZVORSKA VELIKA 1,0
P	1	02015	KAFA SRPSKA TRADICIONALNA
P	1	02014	KISELA VODA MALA 0,33
H	10	01074	SALATA DOMAĆI AJVAR 300g
			SALATA OD SVEŽEG KURUGLA

ARTICLE INSERT ARTICLE DELETE ARTICLE DESCRIPT ARTICLE CARD Catalog F6

#### Note

Ako hoćeš da isključiš kontrolu baze podataka na startu programa (da ubrzaš start programa - ako je baza podataka OK pa nema potrebe za kontrolom), tada u ini fajlu **C\_PGDB.INI** postavi **\_lDBcontrol\_=0**

If you want to turn off the database control at the start of the program (to speed up start program - if the database is OK and there is no need for control), then in the ini file **C\_PGDB.INI** set **\_lDBcontrol\_=0**

#### Special note for Professionals:

1. Iz ove aplikacije je isključen deo koda koji, preko restful web servisa (preko interneta), prihvata i obrađuje račune dobijene sa ručnih mobilnih (android) uređaja koje nose i koriste konobari.
2. Iz ove aplikacije je isključen deo koda koji, preko restful web servisa (preko interneta), komunicira sa LOYALTY karticama (gostima) i koji šalje SMS poruke na njihove mobilne telefone.
3. Obavezno instalirati u windows **PostgreSQL server 9.4 ili noviji** i Obavezno Instalirati u windows priložene fontove: **Archivo Narrow i Wingdng2**. Prvo startovati aplikaciju **KASA-STOLOVI-DATABASE.EXE** da se formira baza podataka za registar kasu u **PostgreSQL serveru**.

1. Part of the code that, through the restful web service (over the Internet), accepts and processes receipts received from hand-held mobile (android) devices carried and used by waiters has been excluded from this application.
2. Part of the code that communicates with LOYALTY cards (guests) via the restful web service (over the Internet) has been excluded from this application and sends SMS messages to their mobile phones has been excluded from this application
3. Mandatory to install in windows **PostgreSQL server 9.4 or later** and Mandatory to install in windows attached fonts: **Archivo Narrow and Wingdng2**. First start the **KASA-STOLOVI-DATABASE.EXE** application to create a database for the cash register in the **PostgreSQL server**.

Version 11.11.2023

