

SOFTWARE DEVELOPMENT SKIDATA

SKIDATA – PARKING LOGIC

CONFIDENTIAL USE

1. Project Description

SKIDATA is a company among the worldwide leading providers of access solutions and visitor management.

SKIDATA has installed more than 10.000 access systems for people and vehicles in: ski regions, shopping centers, major airports, cities, sport stadiums, fair and amusement parks. They are a market leader for access solutions, as well as their efficient management.

2. Stakeholders

The following chart is intended to explain the different stakeholders that will be using the system.

CUSTOMERS	BUSINESS SIDE
Consumer: Customer with vehicle	1) Customer access to SKIDATA parking and the system registers the current access and discount 1 slot 2) Customer leaves and system increases 1 available slot
Operators: Admin	If requires, an admin will manage the status of the system doing the following operations: <ul style="list-style-type: none">• Turn on/off Parking counter system• Enable / Disable manual operation• Set a default available lots value

The following key for stakeholder icons will be used throughout the report.



3. Functional Requirements

Component / Section	Description
Requirements	VMWARE 11.1.0 given if needed
General Vision	System must have access to Trace file and fetch the specific value related to available slots according to real time physical device which will increase or decrease its value.
Technical Information	Every system and server will be installed locally with their corresponding DB instance and interface to manage Parking Counter independently
Languages	Website should be available in English. The system to developed will contain only backend develop, we have the frontend ready so far (HTML5)
Main Requirement	Transform the frontend views to any server side language (PHP, Java, Node) and connect to local database to fetch in real time the trace given value every timeout
Understanding Trace File	The trace is a file that logs every activity related to the server which is installed, inside the trace some specific records are needed for this developer purpose. This is an example of a trace file:

```

AF47      1634 0 ARC:   Dispatcher/ReadAndDispatch: started now   ThreadID = 0x1634 -- 780781
AF47      1820 0 ARC:   message=Connect Error (error); error number=10035; error type=TcpCommunicationErrorObject;
line number=0;
PCP01      664 0 INFO:  Waiting max. 300 seconds for column 41 has initialisation done
PCP01      1388 0 INFO:  Observation thread for C:\Program Files (x86)\Skidata\Parking\Checkpoint\SAEULE.EXE 41 3
(unknown) started
AF41      1A20 0 DB:    Database encryption for LOCAL is enabled.
AF41      1A20 0 DB:    Database encryption for CENTRAL is enabled.
AF41      1A20 0 DB:    Database encryption for LOCAL is enabled.
AF41      1A20 0 INFO:  TRANSLAT: shared memory is existing - simply mapping view
AF41      1A20 0 MAIN:  Process started now
AF41      1A20 0 MAIN:  License plate recognition is disabled because no IP-Adress or IP-Port is configured!
AF41      14A4 0 INFO:  CommandDispatcherThread started
AF41      14A0 0 INFO:  CCodingUnitInterface::HandleCmdThread started
AF41      180C 0 MAIN:  Start High-Priority-ChannelThread for Channel 1540020AF41
AF41      16EC 0 KKT:   CTerminalManager::InitThread - Info: Necessary module (EPI) not allowed or expired.
AF41      18C8 0 MAIN:  Start Low-Priority-ChannelThread for Channel 1540020AF41LP
AF41      1AE8 0 ARC:   Dispatcher/ReadAndDispatch: started now   ThreadID = 0x1AE8 -- 842656
AF41      1A20 0 ARC:   message=Connect Error (error); error number=10035; error type=TcpCommunicationErrorObject;
line number=0;
DBC01      1A78 0 DB:    Database encryption for LOCAL is enabled.
DBC01      1A78 0 DB:    Database encryption for CENTRAL is enabled.
DBC01      1A78 0 DB:    Database encryption for LOCAL is enabled.
DBC01      1A78 0 MAIN:  DbCheck - started
PCP01      8F0 0 INFO:  Observation thread for DbCheck.exe(1540020DBC01) started
MENU01     18C4 0 MAIN:  uo_app.clicked
MENU01     18C4 0 UI:    (w_abstrakt): w_hauptmenu_app(67564) show
MENU01     18C4 0 UI:    (w_abstrakt): w_hauptmenu_app(67564) hide
MENU01     18C4 0 MAIN:  w_hauptmenu_app.deactivate
MENU01     18C4 0 MAIN:  w_hauptmenu_app.close
MENU01     18C4 0 MAIN:  App: w_show_invisible_proc - Typ: 2 - Notlauf: 1 MenuepunktNr: 154
MENU01     18C4 0 MAIN:  wf_application_beenden: w_450.iu_laufende_application.iw_laufende_application is valid:
w_hauptmenu_show_invisible_proc
MENU01     18C4 0 MAIN:  DeleteRow dw_infol: w_hauptmenu_show_invisible_proc row: 0
MENU01     18C4 0 MAIN:  App: w_aufruf_systemeinst - Typ: 2 - Notlauf: 0 MenuepunktNr: 159
MENU01     18C4 0 UI:    w_abstrakt.wf_get_pos_hauptfenster - x: 969 y: 316 h: 2296 w: 3657
MENU01     18C4 0 UI:    w_abstrakt.wf_get_pos_hauptfenster - x: 969 y: 316 h: 2296 w: 3657
MENU01     18C4 0 UI:    (w_abstrakt): w_syseinst(1443904) show
MENU01     18C4 0 MAIN:  Programm offen - Titel1
MENU01     18C4 0 MAIN:  Show: w_syseinst true Visible: true
MENU01     18C4 0 MAIN:  App: w_aufruf_explorer - Typ: 2 - Notlauf: 1 MenuepunktNr: 151
MENU01     18C4 0 MAIN:  wf_application_beenden: w_450.iu_laufende_application.iw_laufende_application is valid:
w_aufruf_explorer
MENU01     18C4 0 MAIN:  DeleteRow dw_infol: w_aufruf_explorer row: 0
MENU01     18C4 0 MAIN:  Programm offen - Titel1
MENU01     18C4 0 MAIN:  Show: w_syseinst true Visible: true
MENU01     18C4 0 MAIN:  Programm offen - Titel1
MENU01     18C4 0 MAIN:  Show: w_syseinst true Visible: true
MENU01     18C4 0 MAIN:  w_syseinst tiggerevent - closequery

```

Suggestions

Connect to SQL Server Database located on:
 Desktop -> SQL Server Tools -> SQL Server Management Studio.
 Credentials are:
 Server Name: 1540020-01
 Login: **administrator**
 Password: **Hey1U9I4am1from0Skidata!**

4. Deliverables

- 1) Documented code with functionalities, modules and code including installation guide in order to replicate the environment as many times as is required.
- 2) Source code functional that allow to admin to make the followings operations:
 - a. See # of available slots
 - b. Set by default a slot occupancy
 - c. Enable / Disable Parking counter system
 - d. Enable / Disable manual operation