

خدمات IoT
THE IoT SOLUTION
THE TRUE SMART TV
التلفزيون الذكي الحقيقي

FOR HOSPITALITY :
HOTELS, CLINICS,
HOSPITALS

لل فنادق والعيادات
و المستشفيات



THE NEW GENERATION
AUDIO/VIDEO/DATA
INTERACTIVE SOLUTION :
INTERACTIVE SERVICES, DESK
AND HOME ...
ON THE HOTEL ROOM TV !

الجيل الجديد من الخدمات التفاعلية
: البيانات/الصوت/الفيديو
خدمات تفاعلية
و مكتب عمل
على تلفاز غرفة الفندق !

Works on : Linux, Andoid STB, Samsung and LG Smart TV



2021 FEATURES

جديد 2021

- Classic TVIP distribution of digital satellite channels (DVB, DVBS2, SVBS2X, TNT, receivers output)
- Check In and Out (hotel) and PMS interface (Hotel Accounting)
- Personalized Welcome Message TEXT AND VIDEO
- VOD (Video on demand)
- NETFLIX interface
- Programming a specific recording of a film or a show for a client then viewing personalized recordings
- Mail consultation
- Virtual Office (Word processing, Spreadsheet, Agenda, Fax, Secretariat,...)
- Video conferencing from the room
- Weather information and Change (by Internet)
- Music Server (by theme)
- Photo server (by theme)
- Room Services
- Messaging to reception / management / maintenance or to another room
- Chat between rooms (for hotel holiday club)
- Golden Book
- Customers complaint
- Satisfaction customers survey
- Reservation of tennis lessons, sauna, restaurant, car rental, excursions ...
- Maintenance management system (small CMMS-rooms) for housekeepers and maintenance team (with reports of breakdowns and acknowledgment as soon as repair)
- Integration of "room BMS" functionalities: room access control, acquisition of different sensors (temperature, humidity), control of different systems (heating, air conditioning, etc.)

- توزيع TVIP كلاسيكي للقنوات الفضائية الرقمية (DVBS , DVBS2 , SVBS2X , TNT , عبر أجهزة الاستقبال)
- تسجيل الوصول والمغادرة check in/out (الفندق) والصلة مع PMS (برنامج محاسبة فنادق) رسائل وفيديوهات مشخنة للرسائل الترحيبية
- VOD (فيديو حسب الطلب)
- الصلة ب NETFLIX
- برمجة تسجيل معين لفيلم أو عرض ثم مشاهدة التسجيلات بطريقة شخصية
- mail
- مكتب اقتراضي (فاكس ، أعمال سكرتاريا.....)
- معلومات الطقس
- موسيقى حسب الطلب
- إرسال الرسائل إلى الاستقبال / الإدارة / الصيانة أو إلى غرفة أخرى
- الدردشة بين الغرف (لنوادي العطلات الكبرى)
- الكتاب الذهبي
- شكوى الحريف
- استبيان رضا الحرفاء
- حجز ملاعب التنس والساونا والمطاعم وتأجير السيارات وتنظيم الرحلات ...
- وحدة صيانة صغيرة للغرف (CMMS for rooms)



For any additional information or demonstration:

لأي معلومات أو عروض توضيحية إضافية:

[✉ info@embedded-systems.biz](mailto:info@embedded-systems.biz)

CHECK-IN

تسجيل وصول الحريف

Upon arrival at the hotel reception, check-in is done via the hotel's PMS and via our application to specify the language desired for the graphic interface of the TV as well as the types of TV channels desired for the customer.

عند الوصول إلى مكتب الاستقبال بالفندق ، يتم تسجيل وصول الحريف عبر نظام إدارة (PMS) الخاص بالفندق وعبر تطبيقنا لعرض اللغة و القنوات المرغوب فيها على شاشة التلفزيون.

The screenshot displays the ITI ADMIN interface for managing TV and boxes. The main heading is "TV And Boxes" with a sub-heading "TV And Boxes; > Box State". A message at the top indicates "Could not connect to server 192.168.0.27". Below this, a progress bar shows a green segment and a red segment. A table lists TV boxes with columns for ROOM, BOX, MAC ADDRESS, and PORTAL. Two modal forms are overlaid on the screen, one for entering customer details and another for selecting TV categories.

ROOM	BOX	MAC ADDRESS	PORTAL
1171	192.168.0.93	d0:76:58:12:2e:f2	...
1172	192.168.0.94	d0:76:58:12:2e:f2	...

ROOM	BOX	MAC ADDRESS	PORTAL
1111	192.168.0.18		...
1160	192.168.0.94	d0:76:58:12:2e:f2	...
1171	192.168.0.93	d0:76:58:12:2e:f2	...
1173	192.168.0.98	d0:76:58:12:2e:f2	...

TV MODULE

خدمة التلفزيون

In the graphic interface on the TV, the channels are classified by theme and are easily manipulated by our ADMIN software

على التلفزيون , القنوات مصنفة حسب الموضوع ويمكن تعديلها وضبطها بسهولة بواسطة برنامجنا ADMIN

GOLDEN TULIP

Mrs Ahmed SAID
Welcome to your hotel room 1171 . Enjoy your stay at our hotel.

DATE TIME: 14:31 Saturday 01/30
WEATHER: 25 °C clear sky
EXCHANGE RATE: € : 4.4 QAR \$: 3.6 QAR

ALL
National-Arabic
Europe
Sport
News

Do not disturb
Room Cleaning
Abort

MUSIC RADIO TV MOVIES SERVICES

TV - ALL

- 1 TF1HD
- 2 FR2 HD
- 3 FR3 HD
- 4 Canal+
- 5 Al Jazeera
- 6 Al Jazeera Children
- 7 Al Jazeera (English)
- 8 **BeIN Sport**
- 9 MBC Action
- 10 MBC3

CATEGORY	DELETE	EDIT
National-Arabic	✖	✎
Europe	✖	✎
Sport	✖	✎
Arabic	✖	✎
Dutch	✖	✎
News	✖	✎
TEST	✖	✎
Italian	✖	✎
English	✖	✎

Name : BeIN Sport
Protocol : HTTP
URL : 239.1.2.1
Port : :1234
Category : National-Arabic
Aspect : 16.9

VALIDATE CANCEL

ITI ADMIN

TV Management

TV Management > Overview

Search:

Total: 12 (HTTP: 4 - RTSP: 8 - GOP: 0)

ID	CHANNEL	CATEGORY	VISIBLE	REL
01	FR2 HD	France	☑	✎
02	FR3 HD	France	☑	✎

ITI ADMIN

TV Management

TV Management > Import M3U

Category: National-Arabic

Note: Please change the value "max_input_vars" inside (php.ini) for large files .

VIDEO ON DEMAND

أفلام عند الطلب

Our solution integrates a video on demand VOD module with very simple management via themes chosen by the system administrator

كما نقدم خدمة فيديو عند الطلب VOD مع إدارة بسيطة للغاية عبر مواضيع الأفلام التي يختارها مسؤول النظام

The image displays a comprehensive VOD system interface. At the top, the 'GOLDEN TULIP' hotel logo is shown alongside a user profile for 'Mrs Ahmed SAID'. A central menu offers options for 'RADIO', 'TV', 'MOVIES', 'SERVICES', and 'MUSIC'. The 'MOVIES' section is active, showing a list of titles with filters for 'Category: AR - TOTAL: 8', 'French - TOTAL: 14', and 'FR - TOTAL: 1'. An 'ITI ADMIN' sidebar provides access to various management tools like 'Helpdesk', 'Services', and 'Room Management'. A detailed movie management table lists titles such as 'ABOU LEILA', 'Taxi Ballad', and 'Tu mourras à 20 ans'. A 'Multimedia' window shows a movie poster for 'YOU WILL DIE AT TWENTY'. A 'MOVIES- Arabic' player displays a grid of movie thumbnails, including 'ABOU LEILA', 'Les rêves de la ville', 'Les silences du palais', 'MAN OF ASHES', 'PARADISE NOW', 'Souad', 'Taxi Ballad', and 'Tu mourras à 20 ans'. A detailed view of 'ABOU LEILA' provides metadata: Director (Amin Sidi-Boumediène), Writer (Amin Sidi-Boumediène), Actors (Slimane Benouari, Lyes Salem, Azouz Abdelkader, Fouad Megiraga, Meryem Medjkane), Runtime (135 minutes), Year (2020), and Language (Arabic). The interface includes 'VALIDER' and 'ANNULER' buttons for navigation and confirmation.

RADIO

راديو عبر الإنترنت

Our solution integrates an online radio module with very simple management via our ADMIN software

يتضمن برنامجنا وحدة راديو عبر الإنترنت مع إدارة بسيطة للغاية عبر برنامجنا ADMIN

The image displays a user interface for a hotel room, specifically for 'GOLDEN TULIP'. The interface is divided into several sections:

- Header:** 'GOLDEN TULIP' logo and name.
- Guest Information:** 'Mrs Ahmed SAID', 'Welcome to your hotel room 1171. Enjoy your stay at our hotel.'
- Room Details:** 'DATE TIME: 14:44 Saturday 01/30', 'WEATHER: 24 °C clear sky', 'EXCHANGE RATE: € : 4.4 QAR, \$: 3.6 QAR'.
- Service Status:** 'Do not disturb', 'Room Cleaning', 'Abort'.
- Navigation Menu:** 'SERVICES', 'MUSIC', 'RADIO', 'TV', 'MOVIES'. The 'RADIO' option is highlighted.
- Configuration Form:** Fields for 'Name' (RADIO CLASSIQUE), 'Protocol' (HTTP), 'URL' (broadcast.infomaniak.ch/r), 'Port' (empty), 'Category' (Arabic), and 'Aspect' (Original). 'VALIDATE' and 'CANCEL' buttons are visible.
- Radio Selection Menu:** A list of radio stations: 1. FRANCE INFO, 2. SWISS CLASSIC, 3. FRANCE MUSIQUE, 4. RTL, 5. RADIO CLASSIQUE, 6. FUN RADIO, 7. FRANCE INTER, 8. RFI MONDE, 9. RFI MUSIQUE, 10. RMC. The 'RADIO' section is titled 'RADIO' and shows a 'Radio : 00:00:00' timer and a date/time display 'Saturday 30/01 - 14:45'.

MODULE MUSIC ON DEMAND

موسيقى عند الطلب

Our solution also integrates an on-demand music module with very simple management via our ADMIN software

تتضمن خدمتنا أيضًا وحدة موسيقى عند الطلب مع إدارة بسيطة جدًا عبر برنامجنا ADMIN

The image displays three overlapping screenshots of the ITI ADMIN software interface, demonstrating the music on-demand module.

Top Screenshot: Hotel Room Interface
The interface shows a hotel room status for Mrs Ahmed SAID in room 1171. It includes a weather widget (24°C, clear sky), exchange rates (€: 4.4 Q, \$: 3.6 Q), and a navigation menu with icons for MOVIES, SERVICES, MUSIC, RADIO, and TV. A dropdown menu for the MUSIC icon lists categories: American_hits, Arabic_Classic, Tunisian_Rap, and Modern_Arabic.

Middle Screenshot: Music Management Dashboard
The dashboard shows the Multimedia section with Music Management. It displays a list of categories and their total counts:

- Category: American_hits - TOTAL: 8
- Category: Arabic_Classic - TOTAL: 99
- Category: Tunisian_Rap - TOTAL: 8
- Category: Modern_Arabic - TOTAL: 8

Bottom Screenshot: Music Playback and Playlist
This screenshot shows a music player interface. The top bar displays "Track 17 : 00:00:13" and a progress bar at "14:56". Below the player is a playlist titled "Arabic_Classic" with the following tracks:

- 22 Ahmed Chawki - Tsunami ????
- 23 Alan Walker - The Spectre (L)
- 24 Ammar Al Deek - Ya Koun 2017
- 25 Ammar Shammaa Ft. Ghofran -
- 26 Andrawos Bassous & Areej Ich

Right Screenshot: VOD Music Management
The VOD section shows a search bar and a list of categories for selection:

- Arabic_Classic
- American_Hits
- music M4a
- dany
- music_egg
- Retro
- rap_tunisien
- Retro_Old
- Tunisian_Rap
- Arabic_Classic
- Modern_Arabic

ROOM SERVICE

خدمة الغرف

We have integrated the ROOM SERVICE service to the TV to facilitate the visualization of the dishes and its components and integrate them into an automatic order-delivery system

لقد قمنا بدمج خدمة ROOM SERVICE مع الخدمات المعروضة على التلفزيون لتسهيل تصور الأطباق ومكوناتها ودمج هذه الطلبات في نظام معلوماتي

GOLDEN TULIP

Mrs Ahmed SAID

Welcome to your hotel room 1171 . Enjoy your stay at our hotel.

DATE TIME: 15:13 Monday 02/01

WEATHER: 21 °C clear sky

EXCHANGE RATE: € : 4.4 QAR \$: 3.6 QAR

Room Service

Thalassotherapy
Teleshopping
Excursion
Maintenance

Do not disturb
Room Cleaning
Abort

TV MOVIES **SERVICES** MUSIC RADIO

Room Service

Escalope dish

Description :
5 pieces of breaded cutlet with fries.

Price : 15

Room Service

Sea food

Description :
A large platter of varied seafood

Order Registered

OK

Price : 23

Room Service

Sweet onion and honey pizza

Description :
Pizza with onions, capers, honey and freshly grated

Order Registered

OK

Price : 17\$

OK

Room Service

Ham crepe

Description :
Consists of ham, cheese, egg ...

Mrs Ahmed SAID
Do You Confirm Your Order ?

Yes No

Price : 14

TRAVELLING & EXCURSIONS

الترفيه والرحلات

We have integrated a sales service for "EXCURSIONS AND LEISURE" for example, into the services offered on the TV to make more aggressive and direct marketing and integrate these orders into the information system.

لقد قمنا بدمج خدمة بيع أنشطة مثل "الرحلات والتسليه" على سبيل المثال ، في الخدمات المقدمة على التلفزيون لجعل تسويقها المباشر أكثر قوة ودمج هذه الطلبات في نظام معلوماتي

GOLDEN TULIP

Mrs Hamed SAID
Welcome to your hotel room 1171 . Enjoy your stay at our hotel.

DATE TIME: 11:29 Tuesday 02/02
WEATHER: 23 °C clear sky
EXCHANGE RATE: € : 4.3 QAR \$: 3.6 QAR

Room Service
Thalassotherapy
Teleshopping
Excursion
Maintenance

Do not disturb
Room Cleaning
Abort

TV MOVIES **SERVICES** MUSIC RADIO

Excursion Organized By : Royal Tulip
Sea vacation
Leisure activities within 20 km / 12 miles
Price : 100

Excursion Organized By : Royal Tulip
Sea vacation
Leisure activities within 20 km / 12 miles
Price : 100

Mrs Hamed SAID
Do You Confirm Your Order ?
Yes No

Excursion Organized By : Royal Tulip
Sea vacation
Leisure activities within 20 km / 12 miles
Price : 100

Order Registered
OK

Room: _____ Password: _____
Order

List of Orders

ROOM	NAME	ITEM	QTY	DATE
1171	Hamed SAID	Sea vacation	1	02-02-2021 11:41
1171	Hamed SAID	Special evening	1	02-02-2021 11:40
1171	Hamed SAID	Special evening	1	02-02-2021 11:40

Order

ROOM	ITEM	QTY	DATE	DELIVERY	DATE
1171	Special evening	1	28-01-2021 13:47	Hanna Labach	30-01-2021
1171	Disc Festival	1	28-01-2021 13:46	Hanna Labach	28-01-2021
300	Vase	1	28-12-2020 21:18	Hanna Labach	28-12-2020 21:18
300	Lamp	1	28-12-2020 10:47	Sadek ITI	28-12-2020 13:32
1171	Lamp	1	05-10-2019 07:56	wirel	27-12-2020 20:53
1171	Lamp	1	05-10-2019 06:06	Yassin Elbag	27-12-2020 20:53
1171	Sea vacation	1	07-10-2019 10:13	Hanna Labach	07-10-2019 10:14
1171	Special evening	1	05-10-2019 08:10	Hanna Labach	05-10-2019 08:10
1171	Cushion	1	05-10-2019 06:06	Yassin Elbag	05-10-2019 08:10
1171	Sea vacation	1	02-10-2019 17:30	Hanna Labach	02-10-2019 17:30

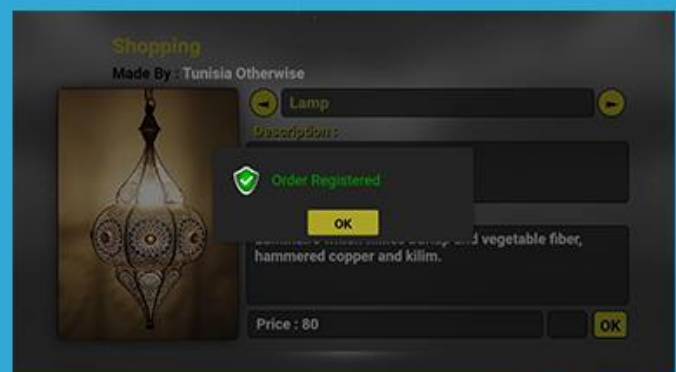
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TELESHOPPING

المبيعات عبر التلفزيون

We have also integrated a TELE-SHOPPING service with the services offered on the TV so that the hotel can offer and sell products that the hotel shops do not necessarily have and integrate these orders into the information system

لقد قمنا أيضًا بدمج خدمة TELE-SHOPPING مع الخدمات المقدمة على التلفزيون حتى يتمكن الفندق من عرض وبيع منتجات لا تمتلكها متاجر الفندق ودمج هذه الطلبات في نظام معلوماتي



Services

Services > Teleshopping

Form for placing a Teleshopping order. It includes a room number field (1171), a dropdown menu for the service (Teleshopping), and a dropdown for the product (Tableau artisanale). There is an "Order" button at the bottom.

List of orders table:

ROOM	NAME	ITEM	QTY	DATE	ORDERS
1171	Hamed SAID	Chester	1	01-02-2023 13:46	✓
1171	Hamed SAID	Special evening	1	01-02-2023 13:59	✓
1171	Hamed SAID	Sea vacation	1	01-02-2023 13:59	✓



List of orders table (repeated):

ROOM	NAME	ITEM	QTY	DATE
1171	Hamed SAID	Lamp	1	01-02-2023 08:38
1171	Test Ben Test	Jewelry	1	28-02-2023 21:35
1171	Test Ben Test	Coral fish	1	28-02-2023 21:46
1171	Test Ben Test	Sea vacation	1	28-02-2023 21:38
1171	Test Ben Test	Street Festival	1	28-02-2023 21:38

Delivery table:

ROOM	ITEM	QTY	DATE	DELIVERY
1171	Special evening	1	01-02-2023 13:47	Hamed Lefrak

THALASSO / BALNEOTHERAPY / MASSAGE / AESTHETIC TREATMENT

خدمات العلاج بمياه البحر/العلاج بالمياه المعدنية/التدليك/السونا

The thalasso / balneotherapy / massage / aesthetic treatment services allows the hotel to better display and detail its services with beautiful images and scientific and medical explanations and allows the hotel guest to book from the room TV

تتيح خدمات العلاج بمياه البحر/العلاج بالمياه المعدنية/التدليك/السونا/العلاج الجمالي للفندق عرض خدماته وتفاصيلها بشكل أفضل مع الصور الجميلة والشروحات العلمية والطبية وتسمح لحريف الفندق بالحجز من تلفزيون غرفته

GOLDEN TULIP
Mrs Ahmed SAID
Welcome to your hotel room 1171 . Enjoy your stay at our hotel.

DATE TIME: 15:18 Tuesday 02/02
WEATHER: 22 °C clear sky
EXCHANGE RATE: € : 4.3 QAR, \$: 3.6 QAR

Room Service
Thalassotherapy
Teleshopping
Excursion
Maintenance

Do not disturb
Room Cleaning
Abort

TV MOVIES **SERVICES** MUSIC RADIO

Thalassotherapy
Well being from the back

Description:
Hydrotherapy treatment, wrap, massage, Plantar reflexology alternating with rehabilitation.

Price : 1425

OK

Services
Beauty special 09-10

Order

Monday
Tuesday
Wednesday
Thursday
Friday

Joint special

	Saturday	Sunday	Monday
09:00 - 10:00			
10:00 - 11:00			
11:00 - 12:00			
12:00 - 13:00	Joint special		
13:00 - 14:00	Saturday - 12:00 TO 13:00		
14:00 - 15:00			
15:00 - 16:00			
16:00 - 17:00			
17:00 - 18:00			

Mrs Ahmed SAID
Do You Confirm Your Order ?
Yes No

Joint special

	Saturday	Sunday	Monday
09:00 - 10:00			
10:00 - 11:00			
11:00 - 12:00			
12:00 - 13:00	Your Reservation		
13:00 - 14:00			
14:00 - 15:00			
15:00 - 16:00			
16:00 - 17:00			
17:00 - 18:00			

Thalasso/Balneotherapy/Massage/Sauna/Aesthetic
sauna

Description:
The sauna (or Finnish bath) is a small wooden hut or a room in which you take a dry heat bath, which can vary from 70 ° C to 100 ° C, for your well-being.

Price : 200

OK

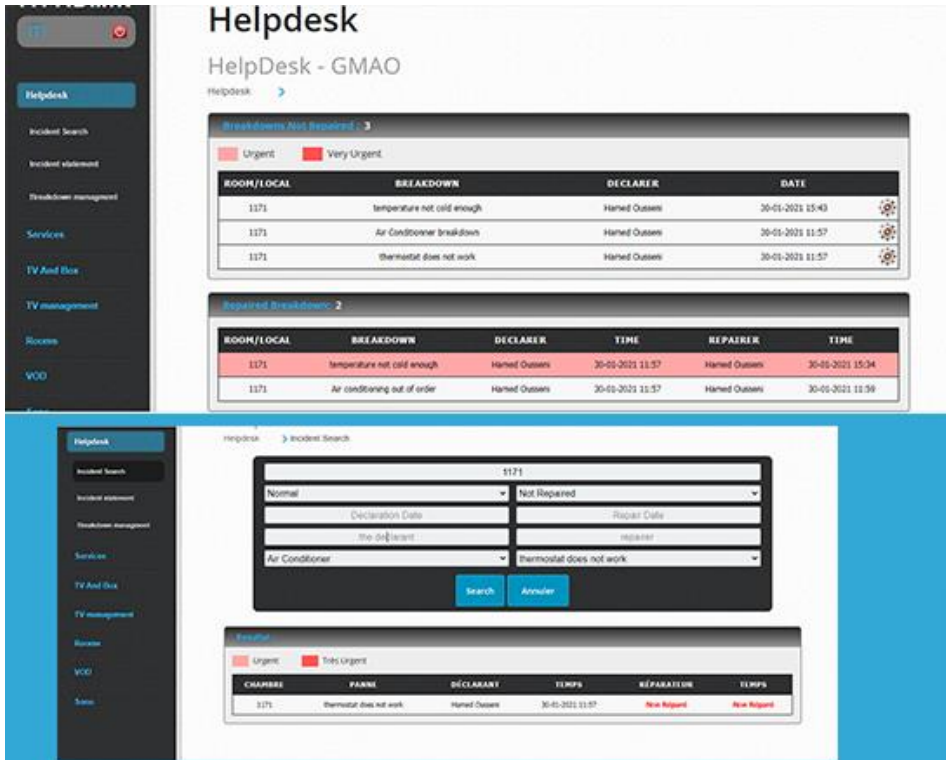
MAINTENANCE :

Small CMMS (Maintenance Management System For Hotel Rooms)

نظام وحدة خاص بتدبير وإدارة أعمال صيانة غرف الفندق

Our "MAINTENANCE" module includes a small BMS (Building Management System) dedicated to the hotel room. Indeed it makes it possible to follow in real time the failures which are detected and declared in the various rooms as well as the follow-up of the progress of their repair

تتضمن وحدة "الصيانة" في هذا النظام وحدة BMS (Building Management System) صغيرة خاصة بغرف الفندق. مما يجعل من الممكن متابعة الأعطال التي يتم اكتشافها والإعلان عليها في كل الغرف في الأبن مع متابعة إعلامية نسبية في الأمام و الأحاطة بهاو إصلاحها



HOUSEKEEPING SYSTEM INFORMATION

نظام متابعة HOUSEKEEPING ال و ال minibar

It is possible to monitor progressively the cleaning for all the hotel rooms in our system information as well as the related problems

نظام HOUSEKEEPING لغرف الفندق يمكن من متابعة تنظيف و إعداد الغرف شيئاً فشيئاً و باستمرار متابعة إعلامية نسبية مع الأمام و الأمانة بمشاكل التموين

The image displays three screenshots of the Golden Tulip hotel room control system interface and a mobile app screenshot. The interface is designed for a hotel room, providing guests with various services and information.

Golden Tulip Room Control Interface (Top Left):

- Logo: Golden Tulip
- Guest Name: Mrs Ahmed SAID
- Welcome message: Welcome to your hotel room 1171 . Enjoy your stay at our hotel.
- DATE TIME: 14:31 Saturday 01/30
- WEATHER: 25 °C clear sky
- EXCHANGE RATE: € : 4.4 QAR, \$: 3.6 QAR
- Menu: ALL, National-Arabic, Europe, Sport, News
- Services: MUSIC, RADIO, TV, MOVIES

Golden Tulip Room Control Interface (Top Right):

- Logo: Golden Tulip
- Guest Name: Mrs Ahmed SAID
- Welcome message: Welcome to your hotel room 1171 . Enjoy your stay at our hotel.
- DATE TIME: 11:18 Saturday 01/30
- WEATHER: 27 °C clear sky
- EXCHANGE RATE: € : 4.4 QAR, \$: 3.6 QAR
- Room Service: Thalassotherapy, Shopping, Excursion, Maintenance
- Do not disturb: Do not disturb, Room Cleaning, Abort
- Services: TV, MOVIES, SERVICES, MUSIC, RADIO

Golden Tulip Room Control Interface (Bottom Left):

- Logo: Golden Tulip
- Guest Name: Mrs Ahmed SAID
- Welcome message: Welcome to your hotel room 1171 . Enjoy your stay at our hotel.
- DATE TIME: 11:17 Saturday 01/30
- WEATHER: 27 °C clear sky
- EXCHANGE RATE: € : 4.4 QAR, \$: 3.6 QAR
- Do not disturb: Do not disturb, Room Cleaning, Abort
- Services: SERVICES, MUSIC, RADIO, TV, MOVIES

Mobile App Screenshot (Bottom Right):

- URL: 192.168.0.100/ITU/admin/
- Rooms: Rooms > HouseKeeping
- BLOC: A
- Floor: 1
- Chambre: 1171, Client: Ahmed SAID, Etat: Nettoyage
- Chambre: 1172, Client: marouf new dary, Etat: Aucune

	INTERACTIVE FEATURES ON TV	الخدمات التفاعلية على التلفاز
0.	GENERAL INTRAODUCTION	مقدمة عامة
I.	CHECK-IN	تسجيل وصول الحريف
II.	TV MODULE	خدمة التلفزيون
III.	VIDEO ON DEMAND	أفلام عند الطلب
IV.	RADIO	راديو عبر الإنترنت
V.	MODULE MUSIC ON DEMAND	موسيقى عند الطلب
VI.	ROOM SERVICE	خدمة الغرف
VII.	TRAVELLING & EXCURSIONS	الترفيه والرحلات
VIII.	TELESHOPPING	المبيعات عبرالتلفزيون
IX.	THALASSO / BALNEOTHERAPY / MASSAGE / AESTHETIC TREATMENT	خدمات العلاج بمياه البحر/العلاج بالمياه المعدنية/التدليك/السونا/العلاج الجمالي
X.	MAINTENANCE : Small CMMS (Maintenance Management System For Hotel Rooms)	نظام وحدة خاص بتدبير وإدارة أعمال صيانة غرف الفندق Small CMMS
XI.	HOUSEKEEPING SYSTEM INFORMATION	نظام متابعة ال HOUSEKEEPING و ال minibar