

ORACLE

Oracle APEX

アイデアからアプリケーションへ：光の速度で実現する環境

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アジェンダ

1.Oracle APEXの紹介

2.デモンストレーション

3.事例の紹介



Oracle APEXの紹介

Oracle APEX: 業界で最も利用されている 企業向けローコード・プラットフォーム

- 顧客 5万, 127カ国
- パートナー 150以上
- 開発者 50万
- アプリケーション 220万以上
- 1日当たりの新規アプリ 3000以上
- 1日当たりの新規インストール 数百



ローコードとスクラッチ開発の比較

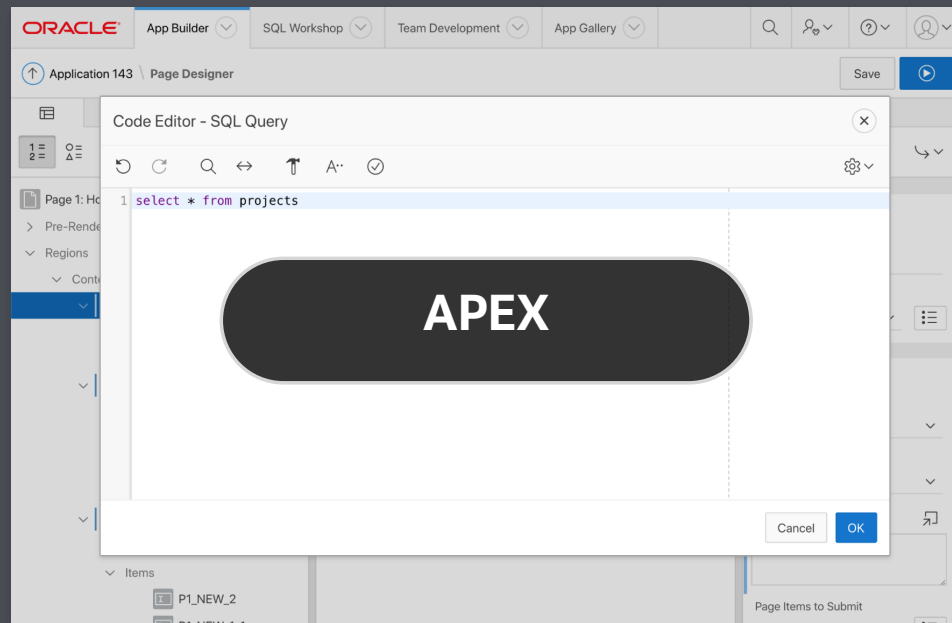
- “10 times faster than traditional methods”
Forrester
- “By 2024, low-code application development will be responsible for more than 65% of application development activity.”
Gartner
- “...compelling productivity gains for professional and citizen development, as well as speed-of-delivery benefits.”
Gartner

ローコードの利点

- リリースまでの期間短縮
- 高い品質とアプリケーションの一貫性
- 習得が容易
- 低い開発・運用コスト
- より高い信頼性 – 少ない不具合
- 柔軟性 – 改変が容易

高い生産性

ローコード



スクラッチ開発



比較

20倍の速さ、100分の1のコード

Oracle APEX

ローコード・アプリケーション開発フレームワーク



デスクトップ向けと
モバイル向けの
Webアプリ開発



データベースにある
データの
可視化と保守



SQLのスキルや
データベースが提供
する能力を活用

Oracle Databaseの機能を活用



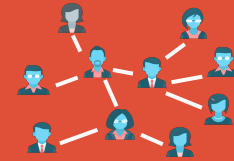
Machine
Learning



Real-Time
Analytics



IoT



Social Graph
Analysis

{JSON}

Documents



Spatial Processing



Blockchain

Oracle APEXの代表的な用途

- スプレッドシートの置き換え
- オポチュニスティック・アプリケーション
- 外部とのデータ共有
- デジタル・トランスフォーメーション(DX)
- Oracle Formsの置き換え / アプリケーション資産のモダナイズ
- ERP / SaaS レポーティング & 拡張

Oracle APEX Everywhere

Autonomous Databaseを含むすべてのOracle Database上で利用可能

- ・ 追加コストなし、サポート対象の機能
 - ・ すべてのエディション、バージョンでサポート
- ・ 開発者数、エンド・ユーザー数、アプリケーション数で課金しない
- ・ Oracle Cloudのすべてのデータベース・サービスで利用可能
- ・ オンプレミス, Oracle Cloud, 他社クラウドで利用可能





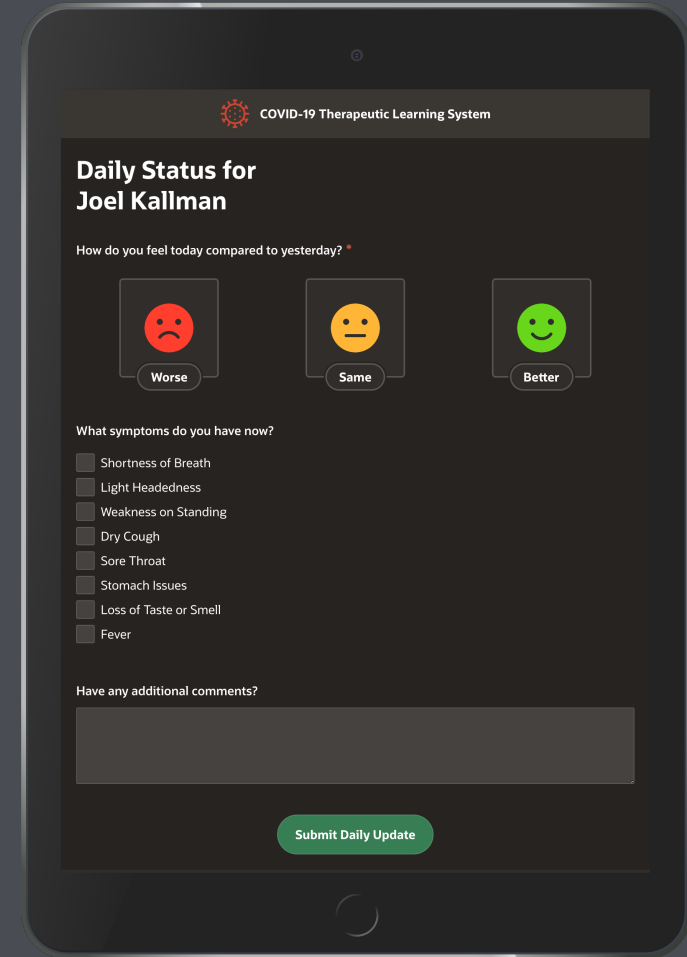
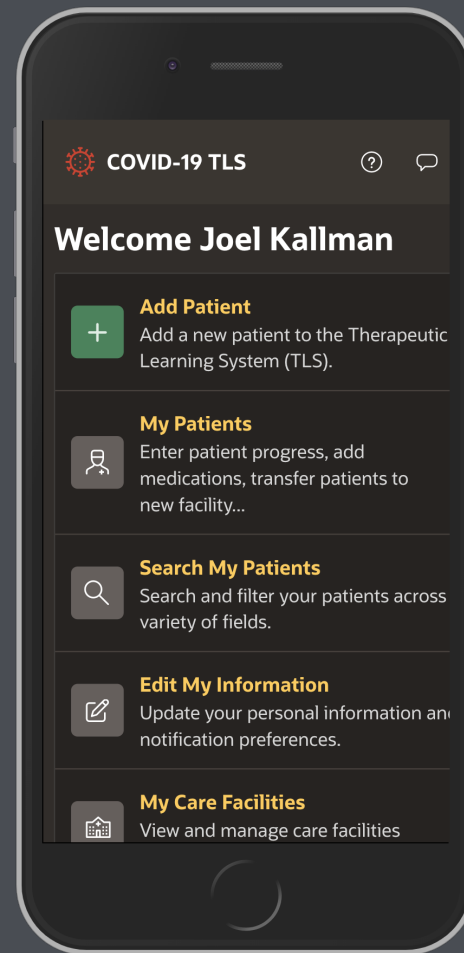
デモンストレーション



事例の紹介

COVID-19 Therapeutic Learning System

- COVID-19の患者にたいして、実際に施された治療に関するデータを収集します。
- COVID-19の患者への治療の全体的な効果を迅速に把握します。
- 2週間弱で開発され、運用が開始されました。
- 利用者登録は医師が行い、患者の追加は医師によって行われます。
- 患者は毎日、電子メールまたはSMSによる通知を受け取り、容体を更新します。



zdnet.com

EDITION: US


zdnet

5G IOT CLOUD AI SECURITY MORE NEWSLETTERS ALL WRITERS

PART OF A ZDNET SPECIAL FEATURE: CORONAVIRUS: BUSINESS AND TECHNOLOGY IN A PANDEMIC

Launching Oracle's COVID-19 Therapeutic app: The back story

Oracle's APEX application development framework was an unsung hero in enabling a drug treatment reporting app to make it from design to full national rollout in the US in barely two weeks. Here's how it happened.




By [Tony Baer \(dbInsight\)](#) for [Big on Data](#)


Topic: April 10, 2020 -- 12:00 GMT (05:00 PDT)[Coronavirus: Business and technology in a pander](#)

COVID-19 TLS

Daily Status for Mary Smith

How do you feel today compared to yesterday? *





The Back Back Story

Shakeeb Rahman - Inventor of Universal Theme



March 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
8	9	10	11	12	13	14
15	16	17	18	19	20	21
		Datamodel	Initial App UI First Demo	UI + DML Changes	Testing Begins	
22	23	24	25	26	27	28
First Design Review 9 Apps Total	Go Dark Mode	Design Review Meeti...	Refine and Test	Refine and Test	Refine and Test	Refine and Test
29	30	31	Apr 1	2	3	4
Refine and Test	Launch					
5	6	7	8	9	10	11



Day Zero

Oracle Einstein

Prophylactic | Definition of Propi

Quick SQL

Patients

attending physician - Google Se

apex.oracle.com/pls/apex/f?p=4500:1100:112354201149345::::

APEX

App Builder

SQL Workshop

Team Development

App Gallery

SR Shakeeb Rahman

Utilities

Quick SQL

Quick SQL

Clear

Samples

Help

Generate SQL

SQL

Settings

Download

Save SQL Script

Review and Run

94 patient_id

95 clinician_id

96 physician_id

97 prescribed_on /date

98 dosage

99 frequency

100 duration_days

101 notes

102

103 status_updates

104 patient_id

105 medication_id

106 reported_by /check self, clinician, physician

107 clinician_id

108 physician_id

109 health_rating number

110 fever_yn

111 temperature number

112 shortness_of_breath_yn

113 light_headedness_yn

114 weakness_on_standing_yn

115 ventilator_y

116 blood_pressure

117 vs_prev_day /check better, worse, same

118 notes

119 noted_on date

120

121

122

123

124

1 -- drop objects

2 drop table physician cascade constraints;

3 drop table clinicians cascade constraints;

4 drop table hospitals cascade constraints;

5 drop table medication cascade constraints;

6 drop table patients cascade constraints;

7 drop table prescriptions cascade constraints;

8 drop table status_updates cascade constraints;

9

10 -- create tables

11 create table physician (

12 id number not null constraint physician_id_pk primary key,

13 name varchar2(255),

14 npi number,

15 note varchar2(4000),

16 location varchar2(4000),

17 email varchar2(255),

18 phone varchar2(30),

19 mobile varchar2(4000),

20 assistant_name varchar2(255),

21 assistant_phone varchar2(30),

22 created timestamp with local time zone not null,

23 created_by varchar2(255) not null,

24 updated timestamp with local time zone not null,

25 updated_by varchar2(255) not null

26)

27 ;

28

29 create table clinicians (

30 id number not null constraint clinicians_id_pk primary key,

31 name varchar2(255),

shakeeb.rahman@oracle.com

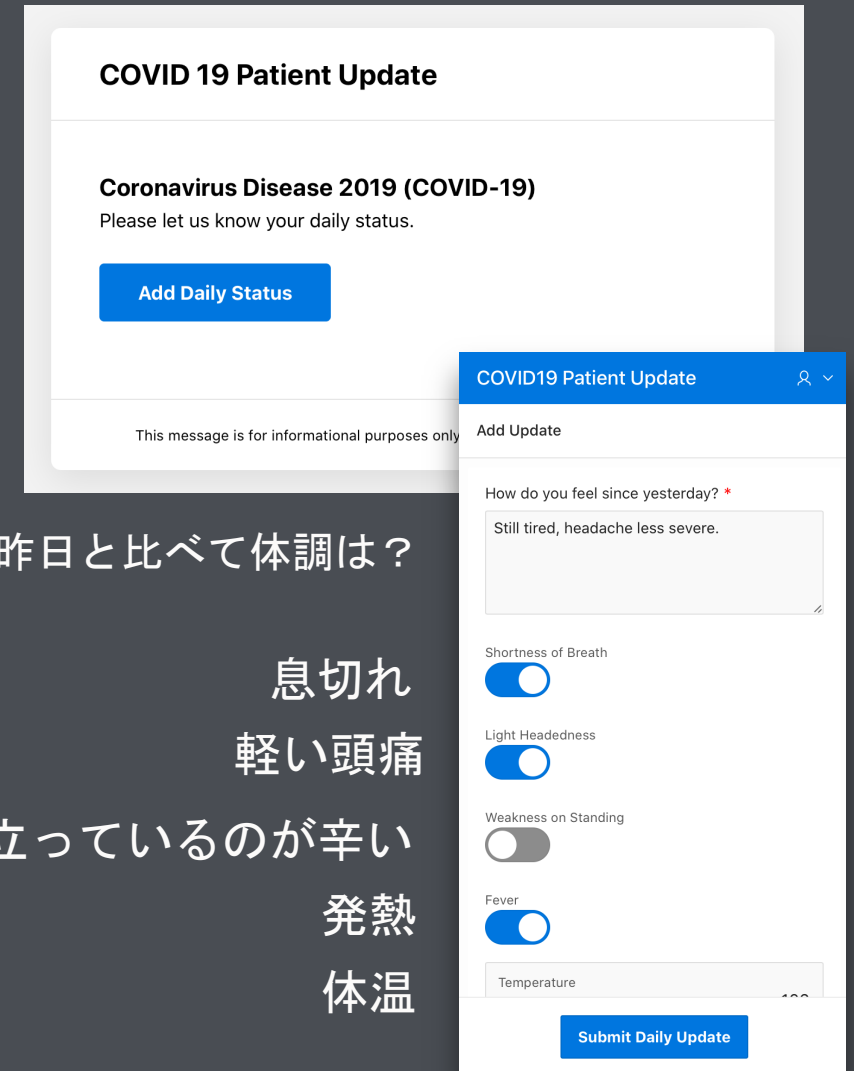
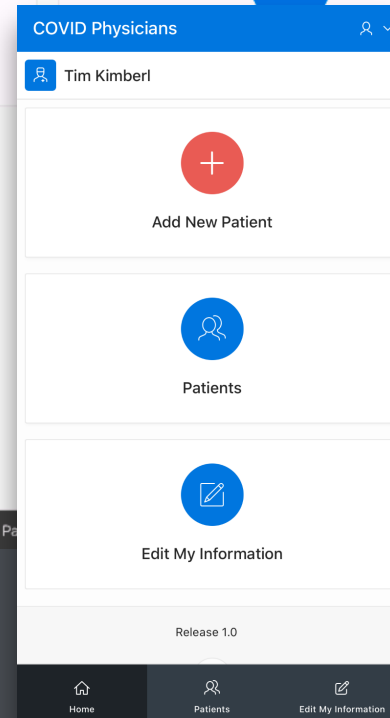
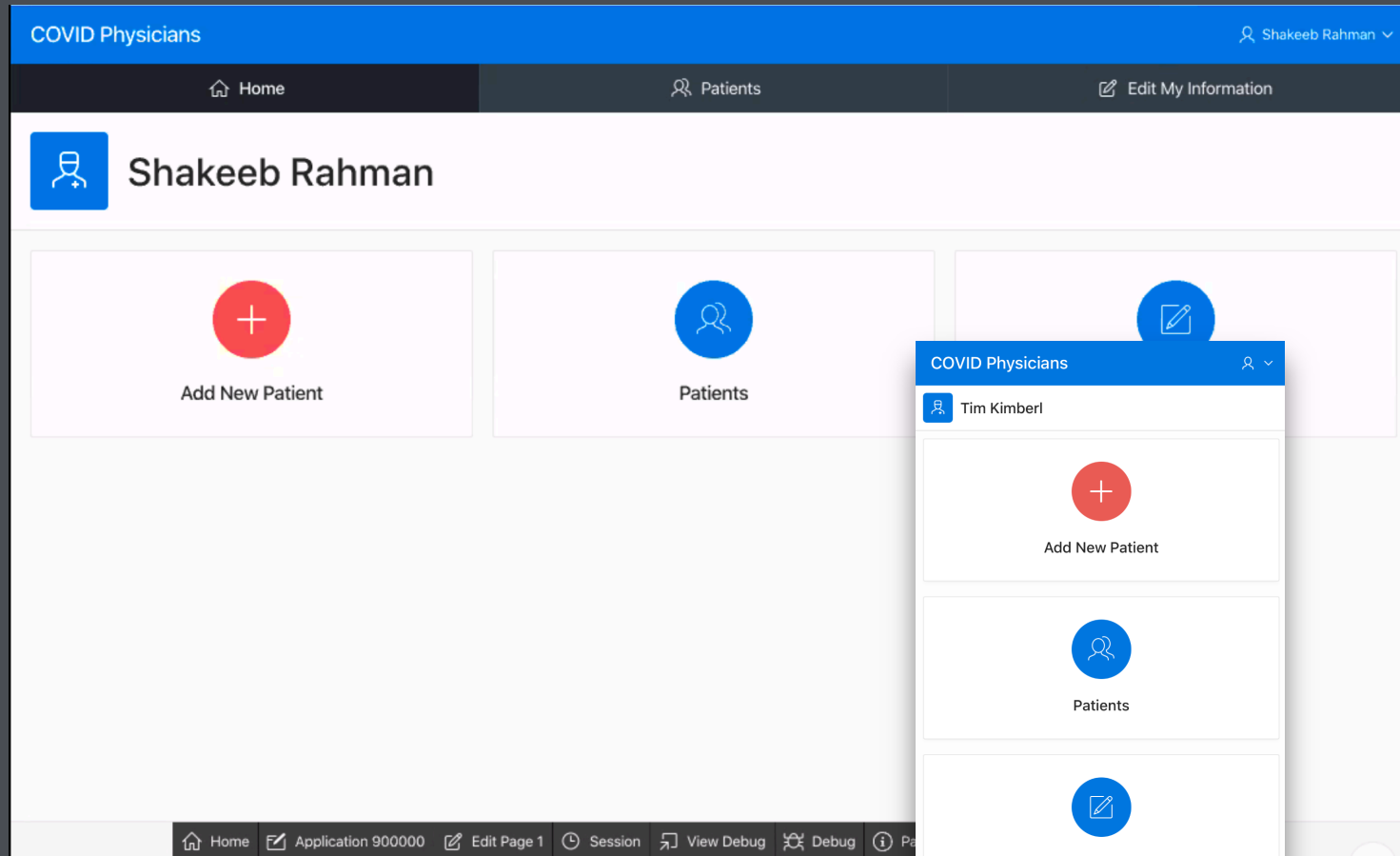
covid19

en

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Application Express 20.10.00.11

Day 1



昨日と比べて体調は？

息切れ

軽い頭痛

立っているのが辛い

発熱

体温



Day 2



COVID-19 Therapeutic Monitoring System

Sign Up

Name *

Shakeeb Rahman

Email *

Verification Code *

EE1RSJN|

Didn't receive a code? [Resend verification code](#)

Verify Email



COVID-19 TMS



Add Patient

Patient Details

Patient Name

Date of Birth

Male

Female

Height
5' 7"

Weight

lbs



Home



Update Patient Status



All Patients

昨日と比べて体調は？
(文字入力から3択へ)

スイッチから
チェックボックスへ



COVID-19 TMS

Status Update

Daily Status for Kyle Hu

How did they feel yesterday? *



Worse



Same



Better

What symptoms did they have?

- ☐ Shortness of Breath
- ☐ Weakness on Standing
- ☐ Sore Throat
- ☐ Fever
- ☒ Light Headedness
- ☐ Dry Cough
- ☐ Stomach Issues

Temperature

°F

Systolic Blood Pressure

mm Hg

Diastolic Blood Pressure

mm Hg

Have any additional comments?

Cancel

Submit Update



COVID-19 Therapeutic Monitoring System

Daily Status

How do you feel since yesterday? *



Worse



Same



Better


What symptoms do you have?





- ☐ Shortness of Breath
- ☐ Light Headedness
- ☐ Weakness on Standing
- ☐ Dry Cough
- ☐ Sore Throat
- ☐ Stomach Issues
- ☐ Fever


Have any additional comments?

Submit Daily Update

Day 3

 **EINSTEIN**






Welcome to Einstein!


Oracle Einstein is an internal community platform that helps you find answers to questions across a number of domain areas.

[See What's New](#)


Favorites




APEX
2,907 Questions



COVID-19 TLS
477 Questions



Database
5,068 Questions



OCI
7,165 Questions

追加



Day 4

Oracle APEX Page Designer interface for Application 900000. The interface shows a sidebar with a tree view of page items, including P110_SYMPTOMS which is highlighted. The main canvas displays a form layout with various input fields and a 'Help' section. A red arrow points from the P110_SYMPTOMS item in the sidebar to the 'Other Symptoms' text area in the form.

Page Item: **Help**

Inline Help Text

Any other symptoms related to COVID-19 not listed above

COVID-19 Therapeutic Learning System (TLS)

Home | Update Patient Status | All My Patients

Add Patient

Patient Details

Patient Name

Date of Birth | Male | Female | Height | inches | Weight | lbs

Patient Status

☒ In Patient ☐ Out Patient

Medical Record Number

Your Institution's Medical Record Number

Care Facility: RESTON HOSPITAL CENTER | Admission Date: 22-MAR-2020

Facility at which patient will be admitted | Date Patient Admitted into Care Facility

First Consultation Date: 22-MAR-2020 | First Symptom Date: 22-MAR-2020

Date first physician-patient conversation related to this COVID-19 presentation | Date patient first had symptoms relating to COVID-19

Symptom Severity: ☐ None ☐ Mild ☐ Moderate ☐ Severe ☐ Critical

Symptoms

Shortness of Breath | Light Headedness | Weakness on Standing | Dry Cough

Sore Throat | Gastro / Intestinal | Fever

Other Symptoms

Any other symptoms related to COVID-19 not listed above

Temperature: °F | Systolic Blood Pressure: mm Hg | Diastolic Blood Pressure: mm Hg

Temperature at current time | Systolic blood pressure at current time | Diastolic blood pressure at current time

On Oxygen: ☐ Yes ☒ No | On Ventilator: ☐ Yes ☒ No

Currently receiving supplementary oxygen | Currently receiving ventilator support

Status Notes

Please enter any other relevant clinical notes to the patient's presentation

Patient Contact Information

Alert Preference: ☐ Emails ☐ Text Messages ☐ Both

If patient does not have a mobile phone or email address, please provide one for the caregiver or responsible party.

Mobile: | Email: | ZIP Code: | ZIP code of the patient's current residency during care

Does patient have a care giver? ☐ Yes ☒ No

Medications

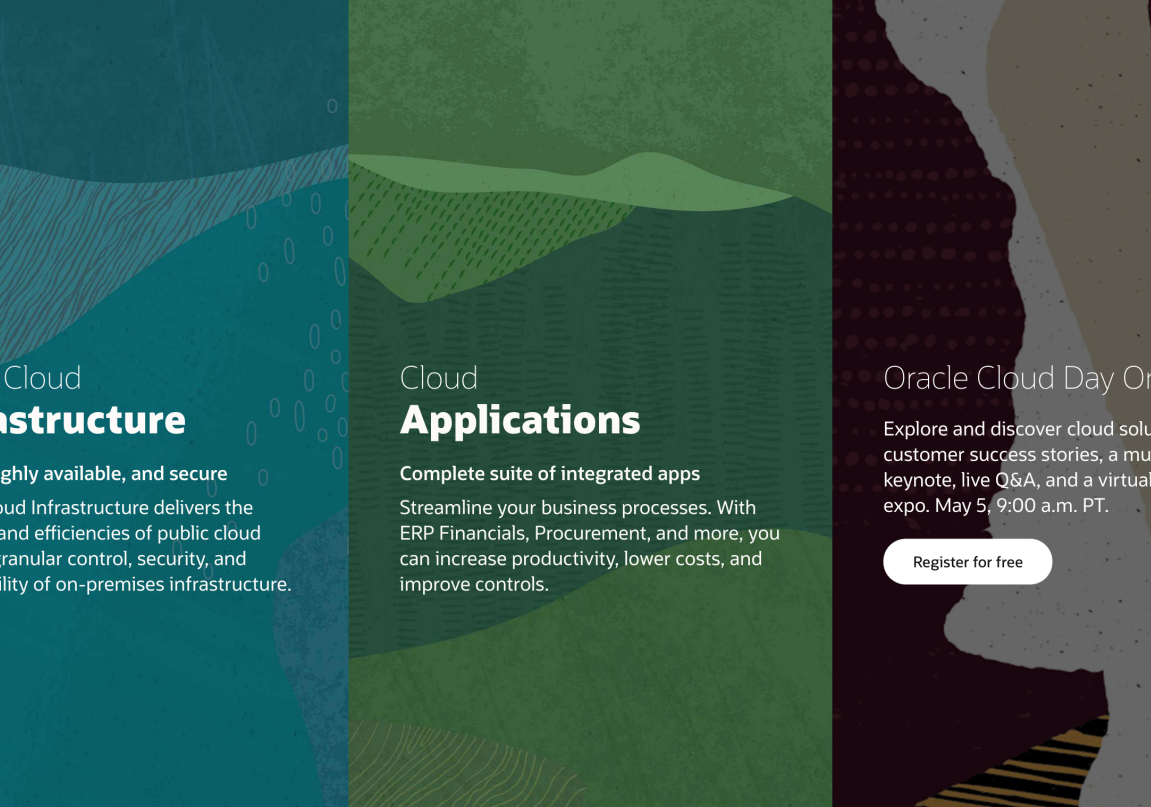
COVID-19 Medication 1

Medication: No medication prescribed at this time

Dosage: | Dosage Unit: mg | Frequency: |

Please specify in mg.

Day 6

A banner for Oracle Cloud Day Online. The background is a dark teal color with abstract, wavy patterns in lighter teal and green. On the left, there's a section for 'Gen 2 Cloud Infrastructure' with a sub-headline 'Elastic, highly available, and secure' and a paragraph about Oracle Cloud Infrastructure. In the center, there's a section for 'Cloud Applications' with a sub-headline 'Complete suite of integrated apps' and a paragraph about streamlining business processes. On the right, there's a section for 'Oracle Cloud Day Online' with a paragraph about exploring cloud solutions and a 'Register for free' button. The top of the banner has a navigation bar with the Oracle logo, a search bar, and links for 'View Accounts' and 'Try Oracle Cloud Free Tier'.

[View Accounts](#)

[Try Oracle Cloud Free Tier](#)

Gen 2 Cloud Infrastructure

Elastic, highly available, and secure

Oracle Cloud Infrastructure delivers the elasticity and efficiencies of public cloud with the granular control, security, and predictability of on-premises infrastructure.

Cloud Applications

Complete suite of integrated apps

Streamline your business processes. With ERP Financials, Procurement, and more, you can increase productivity, lower costs, and improve controls.

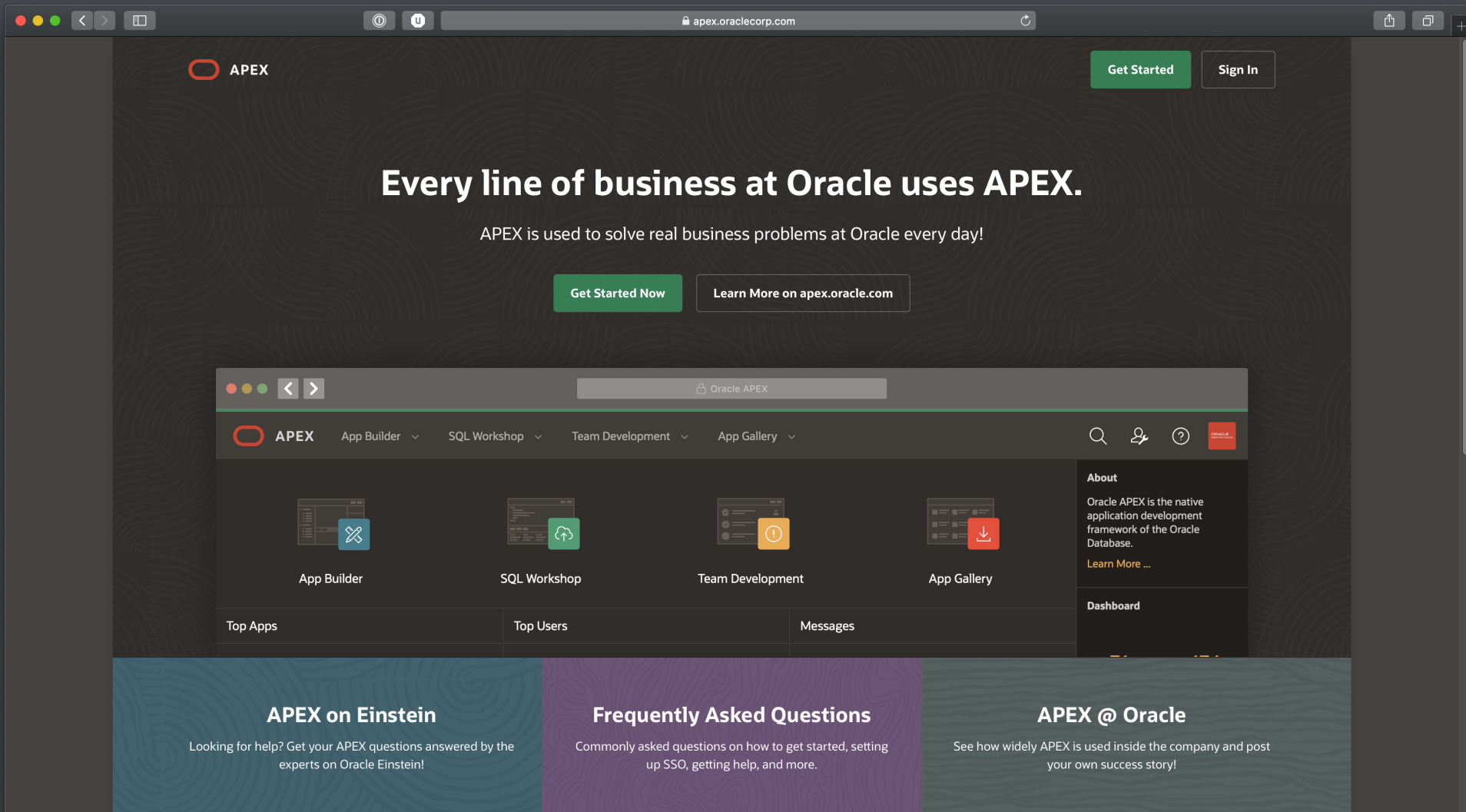
Oracle Cloud Day Online

Explore and discover cloud solutions with customer success stories, a must-see keynote, live Q&A, and a virtual partner expo. May 5, 9:00 a.m. PT.

[Register for free](#)

[illegible]

Day 6



Day 7

Welcome

COVID-19 Therapeutic Learning System

Create Healthcare Practitioner Account

Practitioner Account Sign In

COVID-19 Therapeutic Learning System (TLS)

FAQ Provide Feedback Shakeeb Rahman

Home

Update Patient Status 1

All My Patients

Welcome Shakeeb Rahman



Add New Patient

Add a new patient to the Therapeutic Learning System (TLS).



Update Patient Status

Enter patient progress, add medications, transfer patients...



All My Patients

Search and filter your patients across a variety of fields.



Edit My Information

Update your personal, contact, and care facility information.



My Care Facilities

Add or update your care facilities.



Contact Oracle COVID-19 System Support Team

1-800-323-7355

Your Support ID:
AAAB0424

COVID-19 Therapeutic Learning System (TLS)

FAQ Provide Feedback Shakeeb Rahman

Home

Update Patient Status 1

All My Patients



Patients

Edit Patient

Tyrion Lanister

Inpatient



Add Progress Update



Manage Medications



Discharge Patient



Record Recovered



Record Deceased



Transfer to Another Facility



Transfer to Another Clinician

Patient Details

Active Clinician	Shakeeb Rahman
Patient Name	Tyrion Lanister
Patient Date of Birth	01-Mar-1940 Age: 80

Care Facility

Facility Name	RESTON HOSPITAL CENTER
Admission Date	24-Mar-2020
Medical Record Number	986754

Patient Contact Information

Email	shakeeb@gmail.com
Mobile	Not Provided
Zip	Not Provided

Concurrent COVID-19 Medications

Manage Medication



APEX Applications



Apps

Pages

Main App

43



Patient Update

4


Registration

5

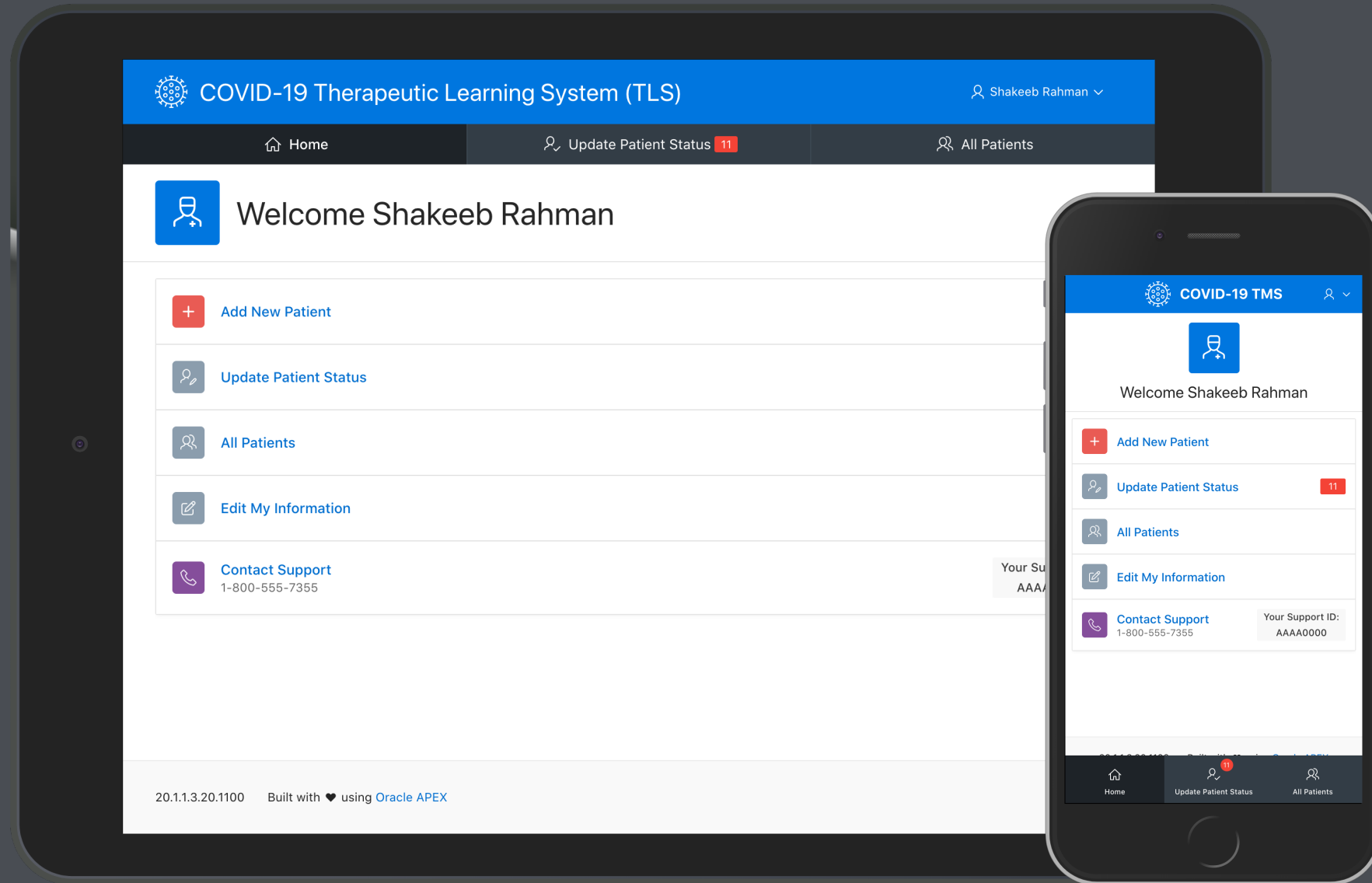
APEX Applications

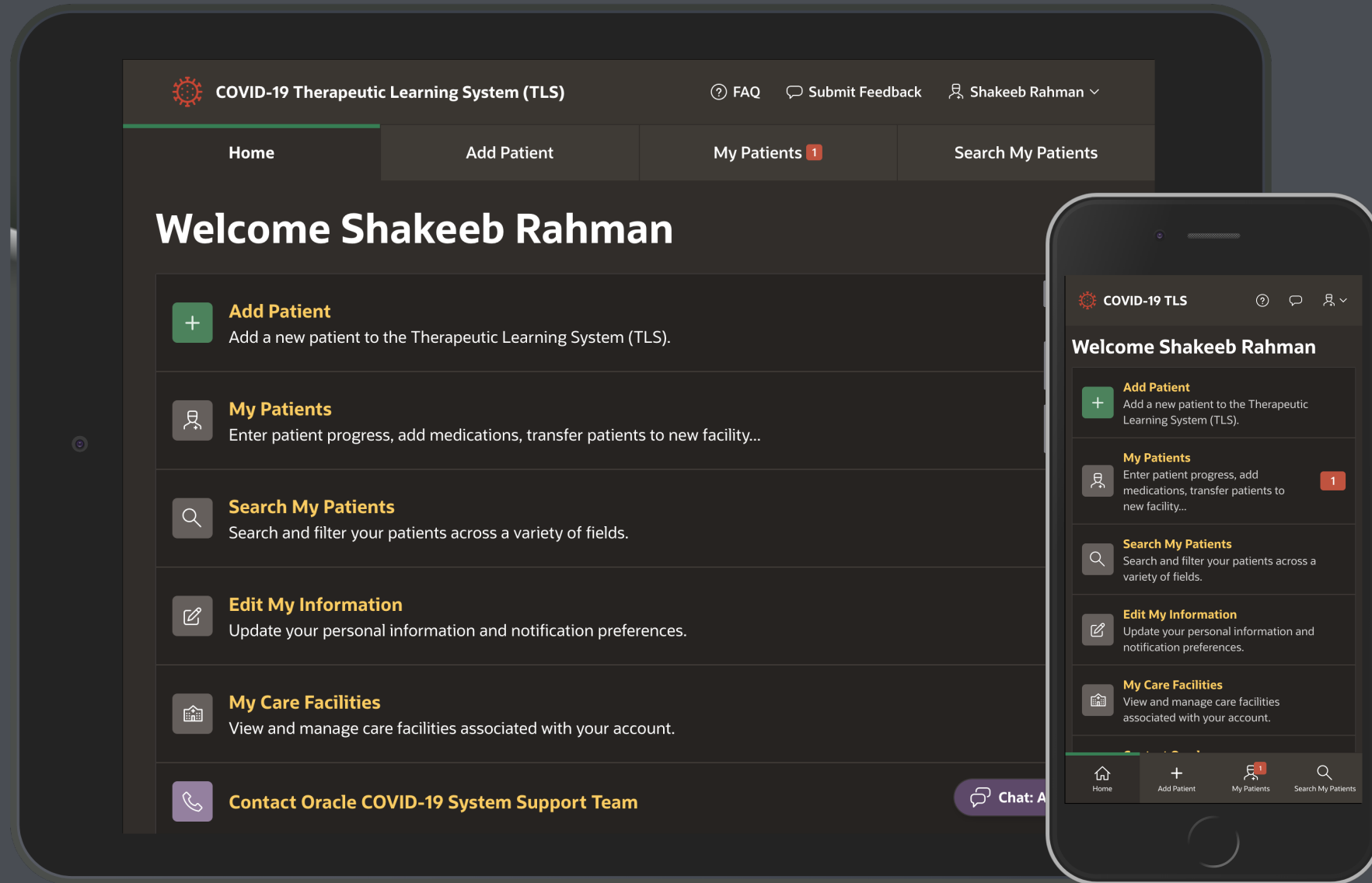
 Apps	Pages	 Back Office Apps	Pages
Main App	43	Administration	67
Patient Update	4	Support Staff	35
Registration	5	Activity Monitoring	23
		Dashboard	28

March 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
8	9	10	11	12	13	14
15	16	17	18	19	20	21
		Datamodel	Initial App UI First Demo	UI + DML Changes	Testing Begins	
22	23	24	25	26	27	28
First Design Review 9 Apps Total	Go Dark Mode	Design Review Meeti...	Refine and Test	Refine and Test	Refine and Test	Refine and Test
29	30	31	Apr 1	2	3	4
Refine and Test	Launch					
5	6	7	8	9	10	11









Create Healthcare Practitioner Account

The U.S. Department of Health and Human Services (HHS) requests your participation in entering patient information for the purpose of understanding, responding to, and potentially developing new treatments to address the COVID-19 emergency. The health information requested on this platform is deemed the minimum necessary for HHS to accomplish essential public health goals. Per HHS, entry of patient information onto this system is fully compliant with HIPAA.

First Name *

Last Name *

Care Facility *

Select Facility

Email *

Please provide your work email address, which must be associated with the hospital, clinic, or practice in which you care for patients. This email address will be used to log in to the system.

DEA Number *

☐ No DEA Number

License Number *

State *

Submit Request



Home

Add Patient

My Patients **1**

Search My Patients

Search My Patients

+ Add Patient

Current Patients [Clear](#)

☒ Yes (12)

☐ No (5)

Patient Status

☐ Inpatient (6)

☐ Outpatient (6)

Care Facility

☐ Reston Hospital Center (6)

☐ Inova Fairfax Hospital (4)

Update Status

☐ Recovered (11)

☐ Overdue for update (1)

You have 1 outgoing transfer pending.

[Review Transfers >](#)

Search all patient names...

↓ Last Name

Abernathy, Delores – 35 yrs

Updated 2 weeks ago

Adidas, George – 45 yrs

Updated 2 weeks ago

Axelrod, Robert – 49 yrs

Updated 2 weeks ago

Kimberl, Tim – 50 yrs

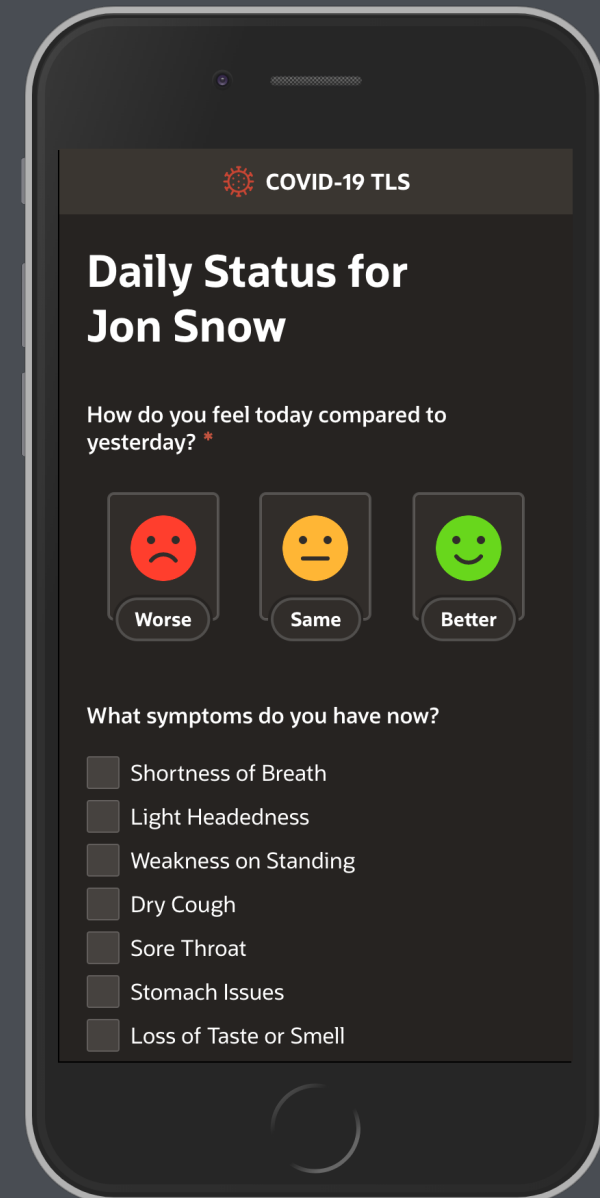
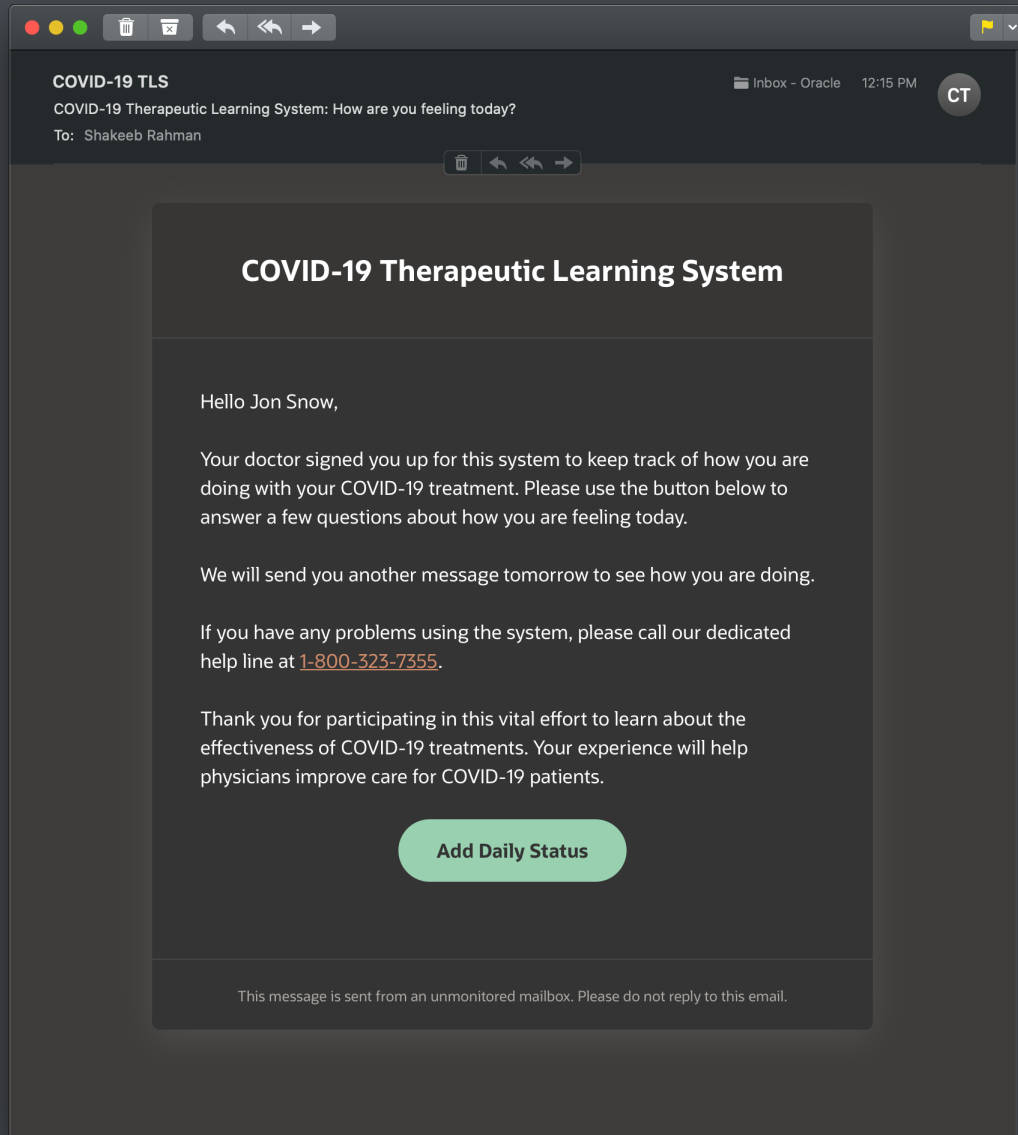
Updated 2 weeks ago

Lannister, Cersei – 65 yrs

Updated 2 weeks ago

Lannister, Jamie – 56 yrs

Chat: App Support



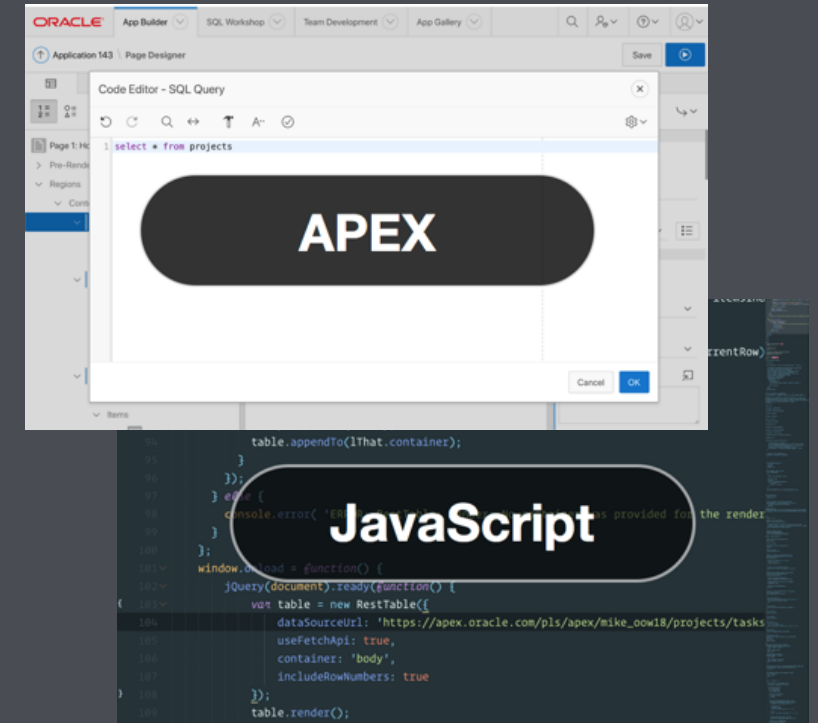


まとめ

Oracle APEX

FREE

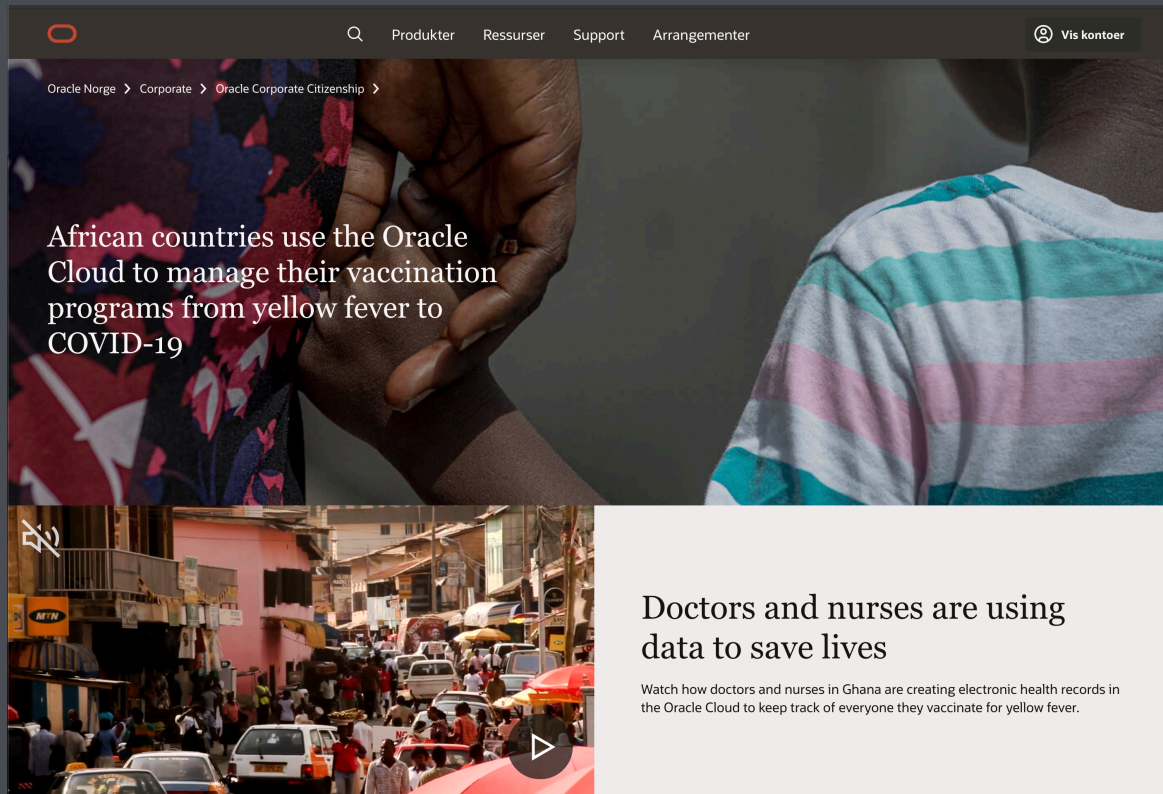
- 業界をリードするローコード開発プラットフォーム
- 気軽に学習を開始できる
- SQL と REST を扱いやすい
- レスポンシブなモバイル・アプリの作成
- 無料を含む全てのOracle Databaseに付属
- Oracle Cloud Free Tierで利用可能
- 世界中、あらゆる業界でのサクセス・ストーリー
- 50万を超える開発者によるコミュニティ



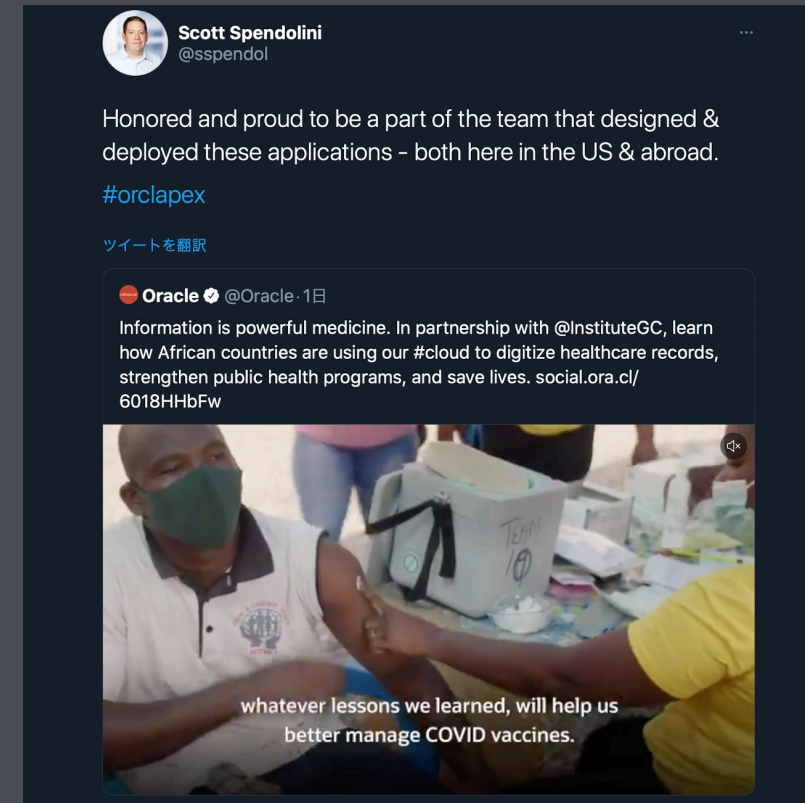
20倍の速さ、100分の1のコード

最後に

Oracle Health Management System – ガーナ、ルワンダ、シエラリオネでの利用



The screenshot shows the Oracle Corporate Citizenship page. The header includes the Oracle logo, a search icon, and navigation links: Produkter, Ressurser, Support, and Arrangementer. A user account link 'Vis kontoer' is also visible. The main content area features a large image of hands being washed, with the text: 'African countries use the Oracle Cloud to manage their vaccination programs from yellow fever to COVID-19'. Below this, there is a video player showing a busy street scene in Ghana, with the text: 'Doctors and nurses are using data to save lives'. A play button icon is overlaid on the video. A small caption below the video reads: 'Watch how doctors and nurses in Ghana are creating electronic health records in the Oracle Cloud to keep track of everyone they vaccinate for yellow fever.'



The screenshot shows a tweet from Scott Spendolini (@sspendol). The tweet text is: 'Honored and proud to be a part of the team that designed & deployed these applications - both here in the US & abroad. #orclapex'. Below the tweet, there is a retweet from Oracle (@Oracle) dated 1 day ago. The retweet text is: 'Information is powerful medicine. In partnership with @InstituteGC, learn how African countries are using our #cloud to digitize healthcare records, strengthen public health programs, and save lives. social.ora.cl/6018HHbFw'. Below the retweet is a video player showing a healthcare worker in a white shirt and green face mask administering a vaccine to a patient. The video has a play button icon and the text: 'whatever lessons we learned, will help us better manage COVID vaccines.'

<https://www.oracle.com/no/corporate/citizenship/health/?intcmp=OHP1123-pn>

Oracle APEXに関する情報はこちらから

apex.oracle.com

ORACLE