



Особенности проектирования UX медицинских систем и приложений

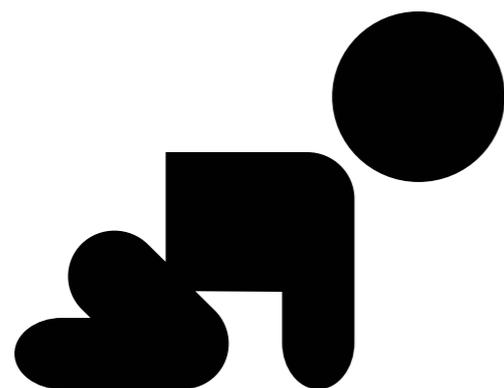
Кирилл Улитин



Опыт



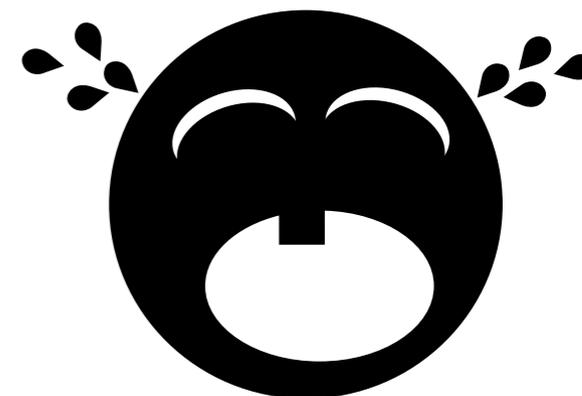
О чем доклад?



Как осилить сложную предметную область

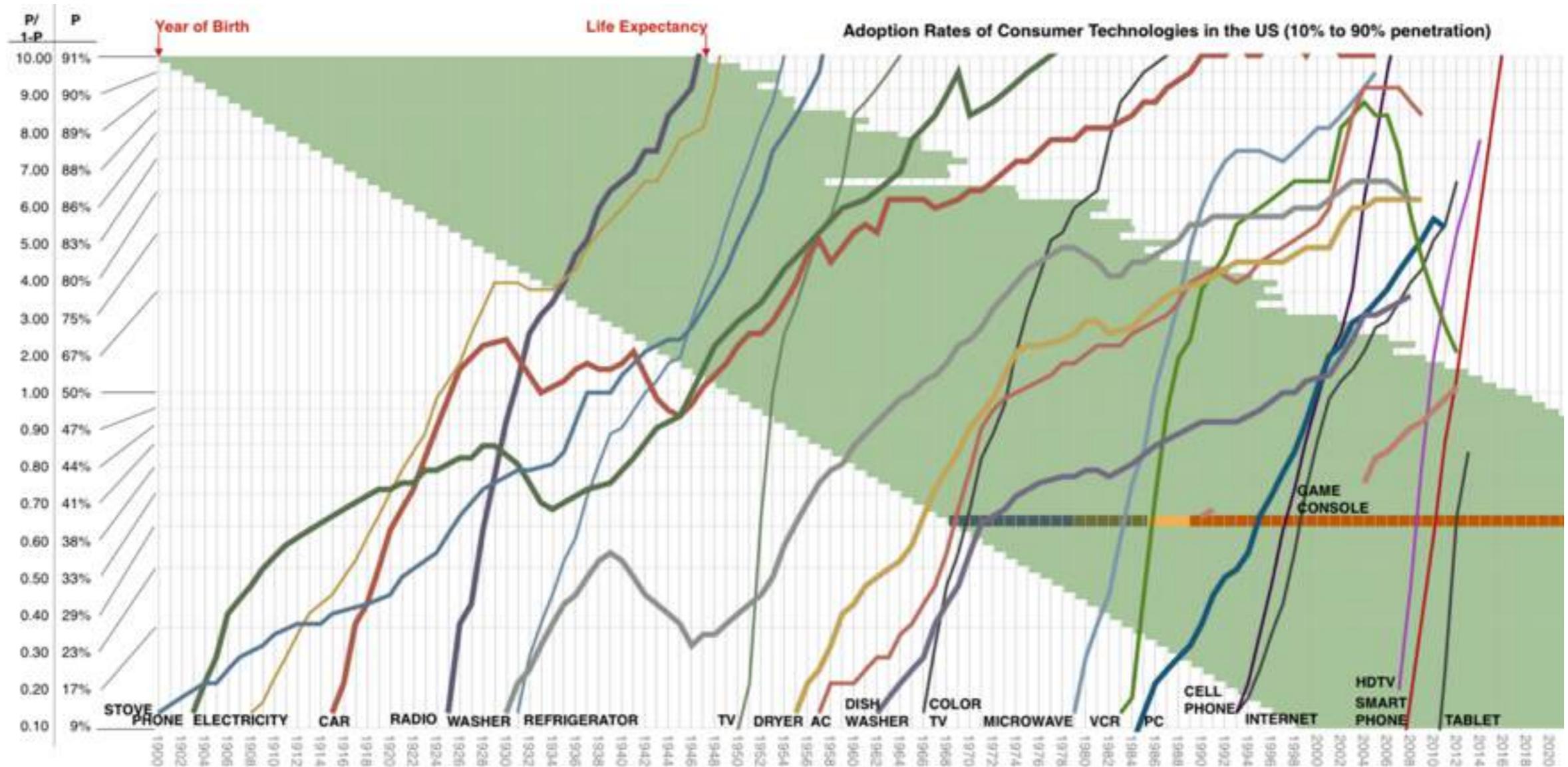


Способы решения UI задач когда отсутствуют альтернативы

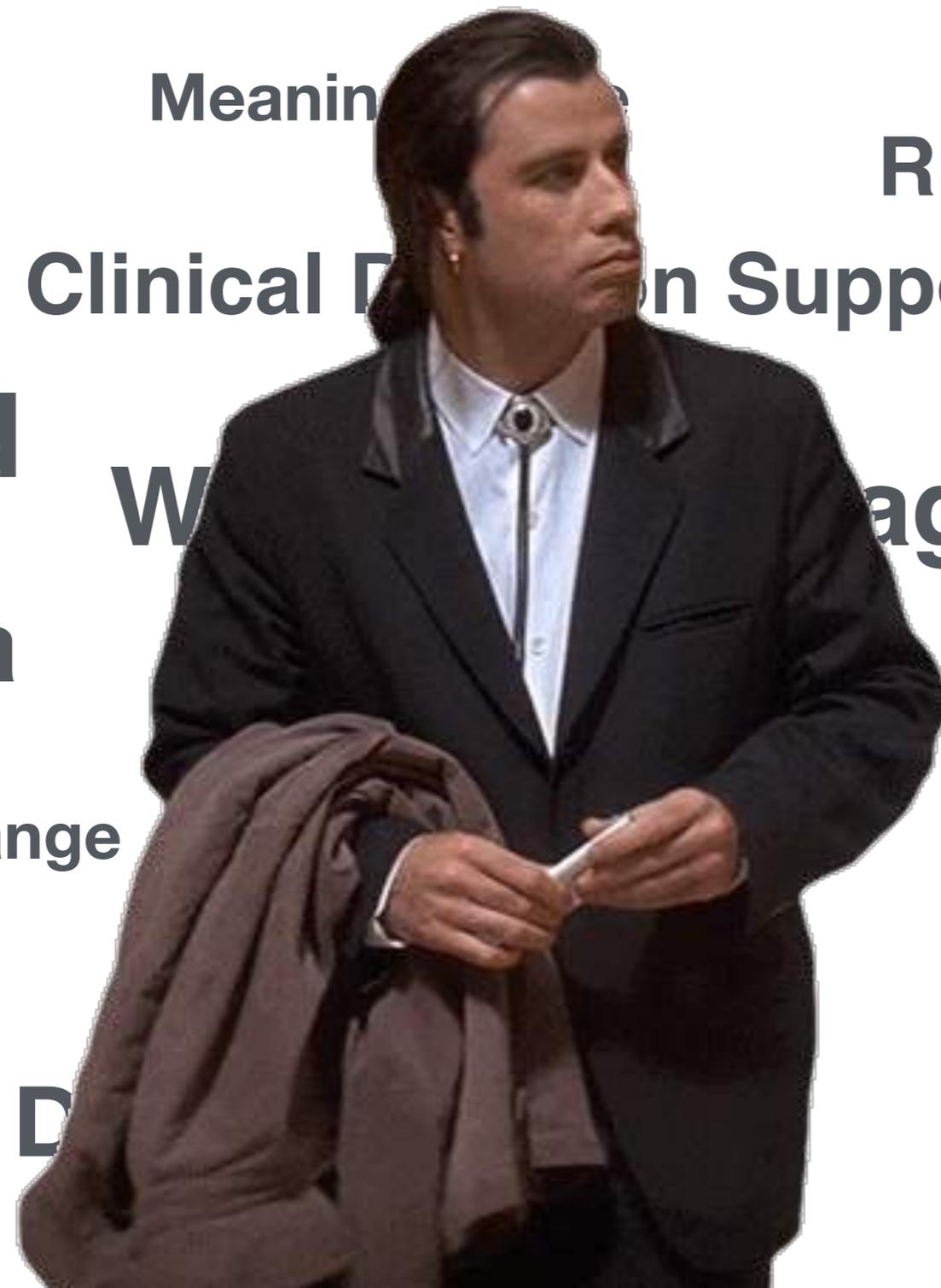


Как не дать погибнуть идеям

Почему так сложно?



Что нас ждет



Meaning

Rules engines

ICD9

Clinical Decision Support

Ontology

Pubmed

W

Management

HL7

Questionnaire

Big Data

Genetic Counselling

Behaviour Change

Patient Engage

EMR

Evidence Med

Radiology

D

Genetics

Бета площадки



BETA
LIST





TRENDWATCHING

entrance

Стандарты

0401060

Поступ. в банк плат.

Списано со сч. плат.

ПЛАТЕЖНОЕ ПОРУЧЕНИЕ N

Дата

Вид платежа



Сумма
прописью

ИНН	КПП	Сумма	
Плательщик		Сч. N	
		БИК	
Банк плательщика		Сч. N	
		БИК	
Банк получателя		Сч. N	
		БИК	
ИНН	КПП	Сч. N	

Meaningful use

Peter Patient PRN: PP293657 35 yrs M CIGNA DOB: 04/01/1980 M: (555) 555-5555 ... Actions

Summary Timeline Profile 12/02/2015 X Print chart New encounter (SOAP)

Go to...

Flowsheets

- Vitals

Diagnoses

Show by ICD-10

Chronic diagnoses

- (S72.91xA) Unspecified fracture of right femur, initial encounter for closed fracture Start: 09/21/15
- Fracture of unspecified part of radius (alone), open
- (S52.90xB) Unspecified fracture of unspecified forearm, initial encounter for open fracture type I or II
- (E11.9) Type 2 diabetes mellitus without complications
- (J00) Acute nasopharyngitis [common cold]
- (F32.9) Major depressive disorder, single episode, unspecified
- (M54.42) Lumbago with sciatica, left side
- (S62.90xA) Unspecified fracture of unspecified wrist and hand, initial encounter for closed fracture
- (E05.90) Thyrotoxicosis, unspecified without

Allergies

Drug allergies

Patient has no known drug allergies
Show inactive (1)

Food allergies

No food allergies recorded

Environmental allergies

No environmental allergies recorded

Medications

You may have duplicate medications (1)

- Ibuprofen (CVS Ibuprofen) 200 MG Oral Capsule (Duplicate)
- Ibuprofen (CVS Ibuprofen) 200 MG Oral Capsule (Duplicate) Start: 11/17/15

Encounters

- 12/02/2015 Office Visit (SOAP Note) CC: No chief complaint recorded
- 12/01/2015 Office Visit (SOAP Note) CC: No chief complaint recorded
- 10/20/2015 Office Visit (SOAP Note) CC: No chief complaint recorded
- 10/19/2015 Office Visit (SOAP Note) CC: (Appt time: 4:00 PM) (Arrival time: 9:26 AM)
- 10/19/2015 Office Visit (SOAP Note) CC: No chief complaint recorded

Show all (11)

Messages

No messages for this patient

Appointments

Past

- Nov 11, 2015 - 09:30 AM Wellness Exam Pending arrival - Nina Wolly
- Nov 10, 2015 - 10:30 AM Illness Pending arrival - Nina Wolly

Медицинский bootstrap

Adam Frankie Everyman

Adam is a **61** year old **White married male** who is **Christian (non-Catholic, non-specific)** and speaks **French**. He has **multiple severe allergies**. In the past year, he did not have medical encounters and has not had any medications prescribed.

birthday	address	telephone	grandfather
December 25, 1954	17 Daws Rd. Blue Bell, MA 02368	h: 781.555.1212	Ralph Relative h: 781.555.1212

Allergies

ALLERGENIC EXTRACT, PENICILLIN

Moderate to severe
Causes hives

ASPIRIN

Moderate to severe
Causes wheezing

Codeine

Moderate to severe

Quick phenotype search:

- Seizures ⓘ
- Focal seizures ⓘ
(also known as: Seizures, partial, afebrile)
- Hypocalcemic seizures ⓘ
(also known as: Seizures due to hypocalcemia)
- Atonic seizures ⓘ
- Generalized seizures ⓘ
(also known as: Seizures, HP:0002157 **Generalized seizures**
Seizures of with initial involvement of both cerebral hemispheres)
Also known as
Generalized seizures, recurrent
Infrequent generalized seizures
Seizures, generalized, afebrile
is a type of
Seizures
[BROWSE RELATED TERMS...](#)
- Hemiclonic seizures ⓘ
- Febrile seizures ⓘ
(also known as: Seizures,
- Absence seizures ⓘ
- Gelastic seizures ⓘ
- Maternal seizures ⓘ

BB Clear

healthdesignchallenge.com

PhenoTips

Тук тук!

- Кто там?

НІРАА!

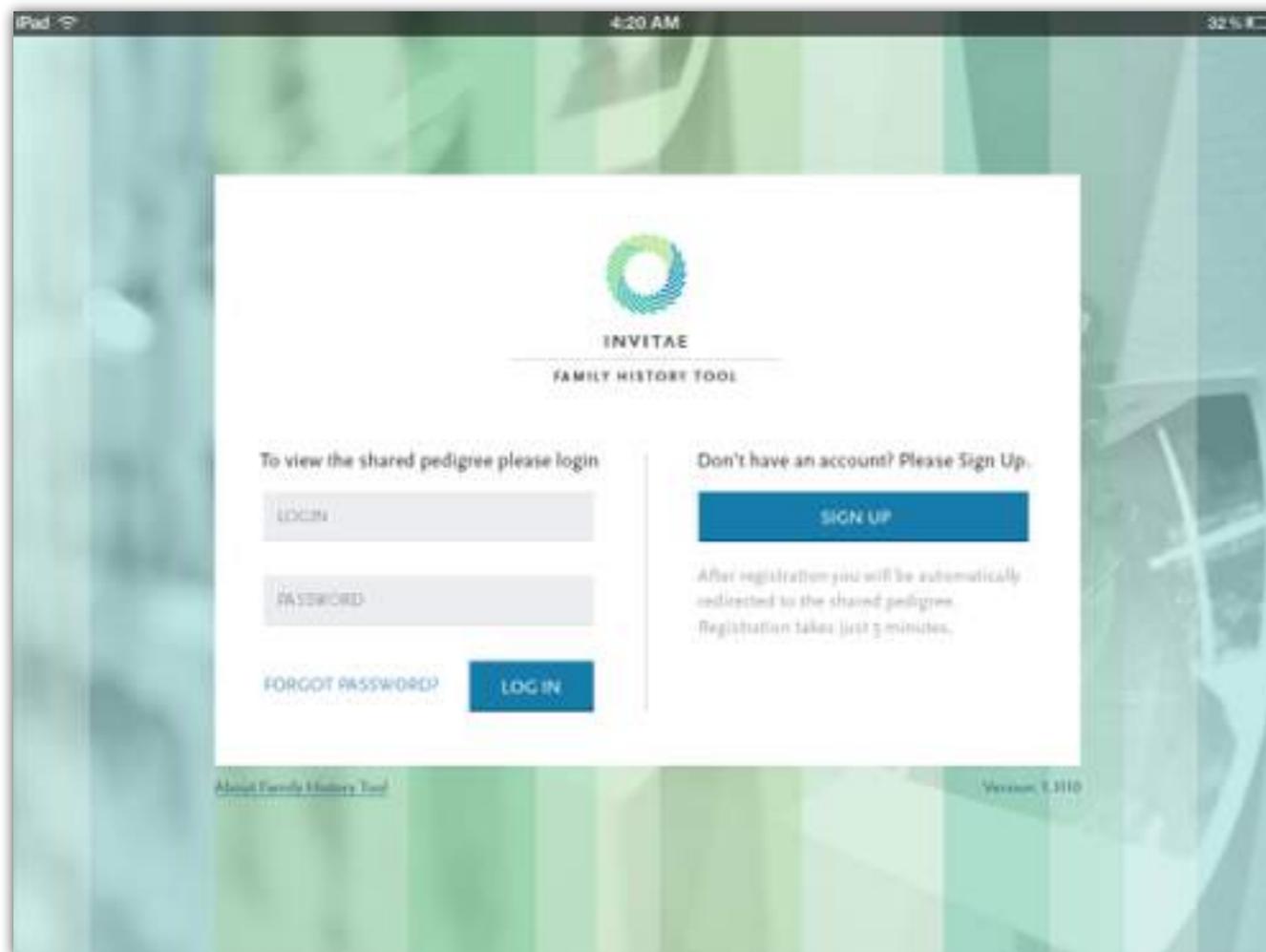
-Какая еще НІРАА?

Не могу вам сказать какая.

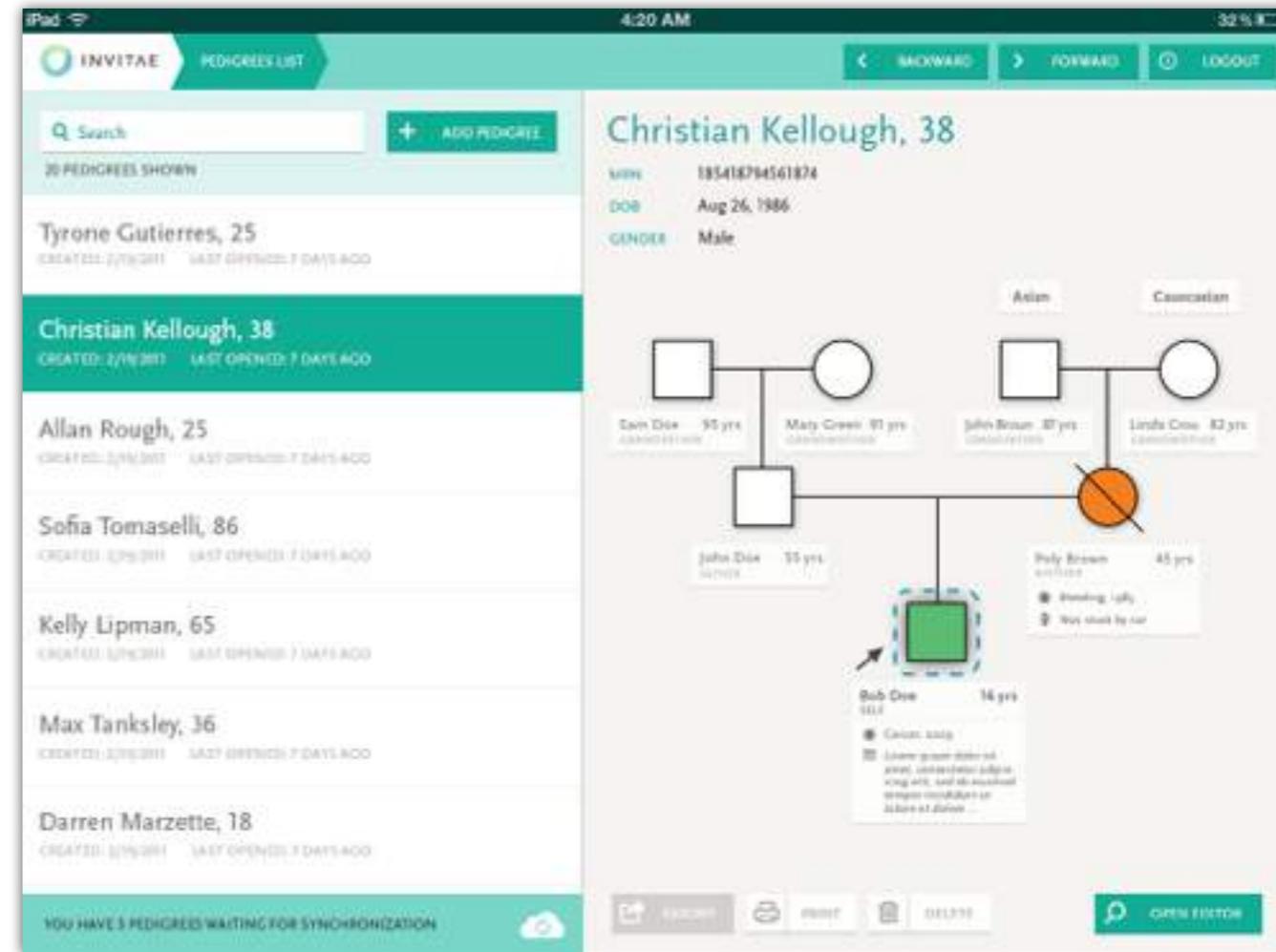


*the Health Insurance Portability and Accountability Act

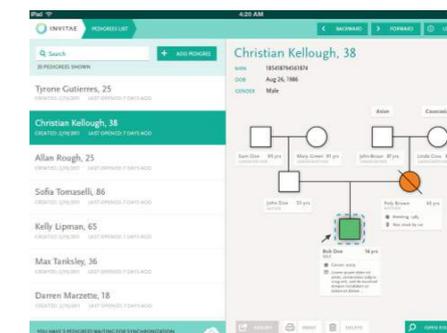
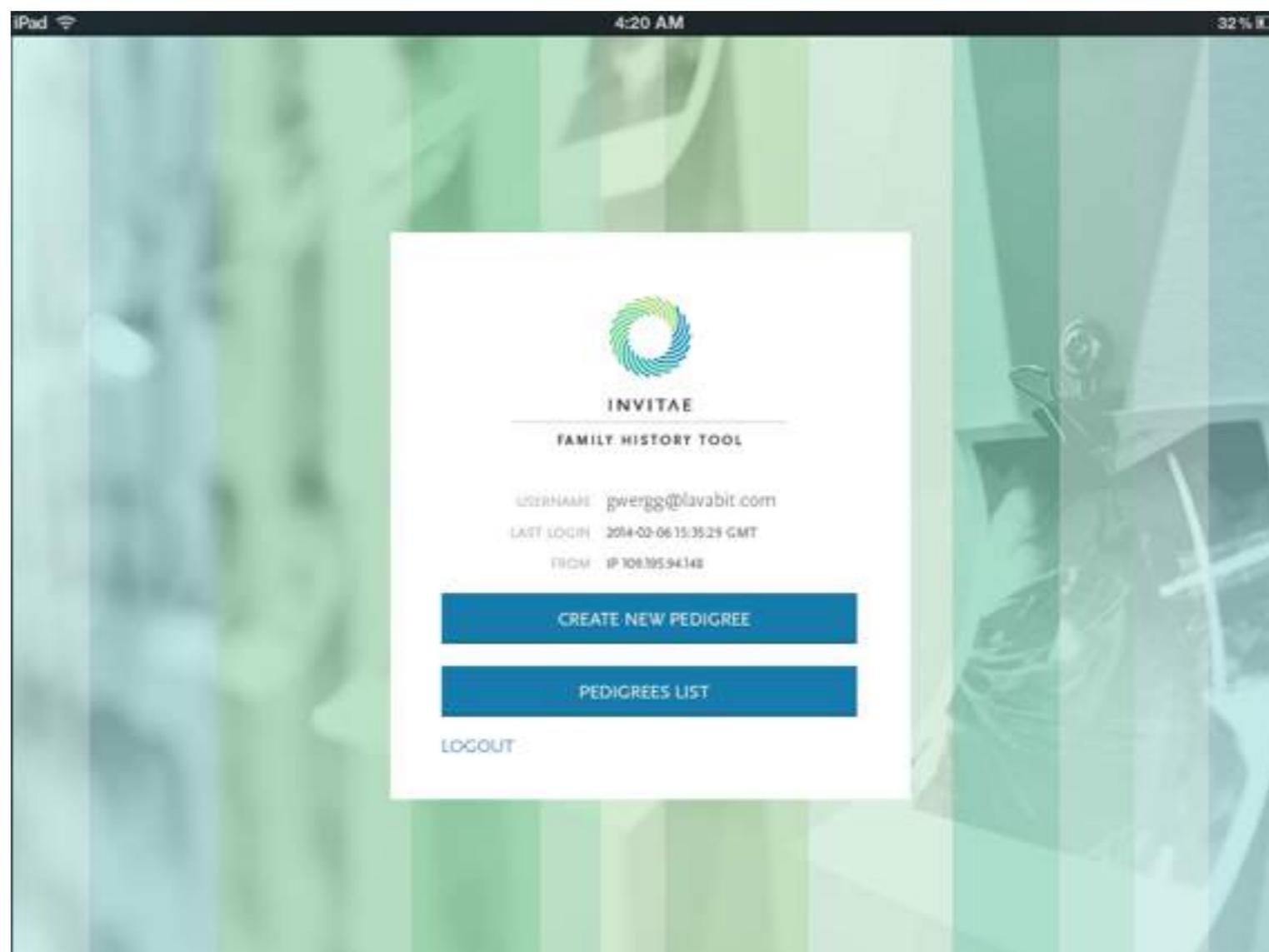
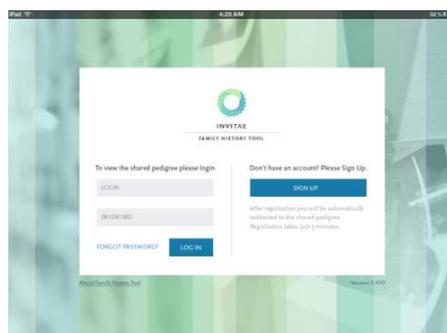
Самый короткий путь не всегда верный



Логин



Список пациентов



Приветственный экран



Ограничения создают возможности!

A photograph of two male doctors in white lab coats. One doctor, wearing glasses, is pointing at a large computer monitor displaying medical scans. The other doctor is looking at the monitor. The monitor shows a grid of various medical images, including what appears to be a brain scan and a cross-section of a body part. The word "Контекст" is overlaid in white text on a dark rectangular background in the center of the image.

Контекст

3 of 5

Lab Results Liver Panel

Date	ALT/SGPT	AST/SGOT	ALKP	TBILI	DBILI	GGT
08/26/2011 14:35	21 U/L 10-55	18 U/L 10-40	32 U/L 45-115	0.4 mg/dl 0.0-1.0	0.1 mg/dl 0-0.4	
12/22/2010 09:35	PEND U/L 10-55	PEND U/L 10-40	PEND U/L 45-115	PEND mg/dl 0.0-1.0		
12/22/2010 09:25	PEND U/L 10-55	PEND U/L 10-40	PEND U/L 45-115	PEND mg/dl 0.0-1.0		

1 of 1

ANCR

Due	Level	Patient
-207 days 16 hours	Red Alert	00000004 (MGH)

UI здорового врача

3 of 5

Lab Results Liver Panel

Date	ALT/SGPT	AST/SGOT	ALKP	TBILI	DBILI	GGT
08/26/2011 14:35	21 U/L 10-55	18 U/L 10-40	32 U/L 45-115	0.4 mg/dl 0.0-1.0	0.1 mg/dl 0-0.4	
12/22/2010 09:35	PEND U/L 10-55	PEND U/L 10-40	PEND U/L 45-115	PEND mg/dl 0.0-1.0		
12/22/2010 09:25	PEND U/L 10-55	PEND U/L 10-40	PEND U/L 45-115	PEND mg/dl 0.0-1.0		

1 of 1

ANCR

Due	Level	Patient
-207 days 16 hours	Red Alert	00000004 (MGH)

UI врача-радиолога

Add condition ?

Last HPO ICD9CM SNOMEDCT General Search...

A

12 All ✓ CHOOSE

Abnormal form of 5th finger ✓ CHOOSE

Abnormal dermatological laboraory findings ✓ CHOOSE

Abnormal cardiological findings ✓ CHOOSE

Abnormality of globe location or size ✓ CHOOSE

Accessory middle phalanx of middle finger ✓ CHOOSE

Accessory middle-finger phalanges ✓ CHOOSE

CANCEL + ADD CUSTOM CONDITION > DONE

Таксономия

Risk Assessment Properties

Ethnicity

Ashkenazi Jewish

BRCA Testing

BRCA1 POSITIVE NEGATIVE

BRCA2

Colon and Endometrial

MLH1

MSH2

MSH6

Melanoma Testing

P16 POSITIVE NEGATIVE

CANCEL

Фольксономия



**KEEP
CALM
AND
DON'T BE
COPYCAT**

Ничего.

Где брать референсы?

Go back to dribbble.com or [contact us](#) about a problem.

dribbble



Если в dribbble ничего нет



страшное



красивое

FAMILY HEALTH HISTORY

 Personal Information Health Information

Cancer History

Genetic Disorders

 Family

Mother

Father

Children

Siblings

Maternal Grandparents

Paternal Grandparents

 Final Step Finish

Please answer these questions to help speed things up at your next visit. It should take about 30 minutes.

Please enter your e-mail to start *

 **START**



Hello, John.

We kindly ask you to complete this questionnaire in order to prepare for your next visit. This questionnaire should take about 30 minutes to complete.

Please enter your e-mail to start *

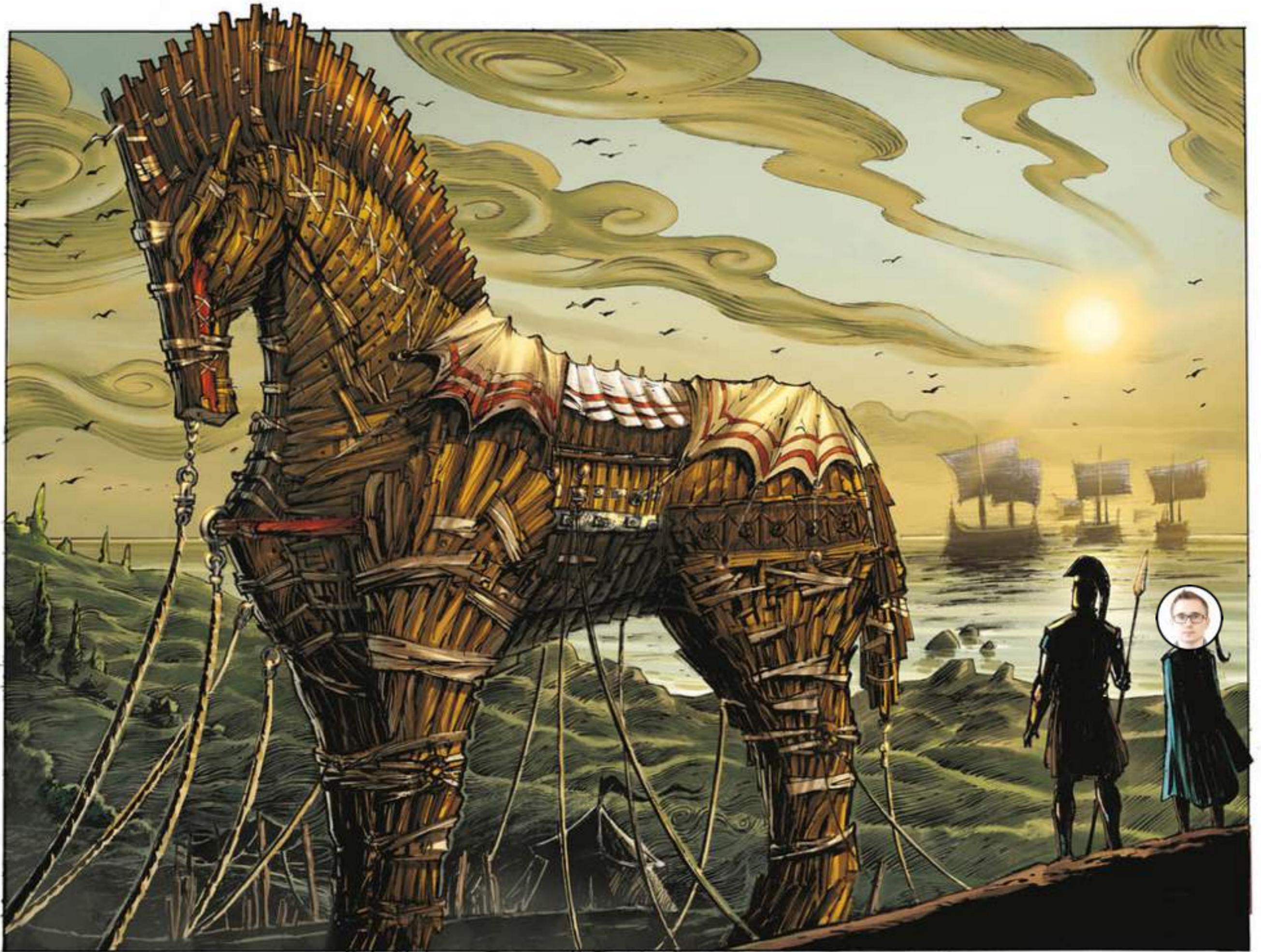
e.g. name@mailbox.com

 **START**

CAUTION



— THIS IS SPARTA





Hello, John.

We kindly ask you to complete this questionnaire in order to prepare for your next visit. This questionnaire should take about 30 minutes to complete.

Please enter your e-mail to start *

e.g. name@mailbox.com

 **START**

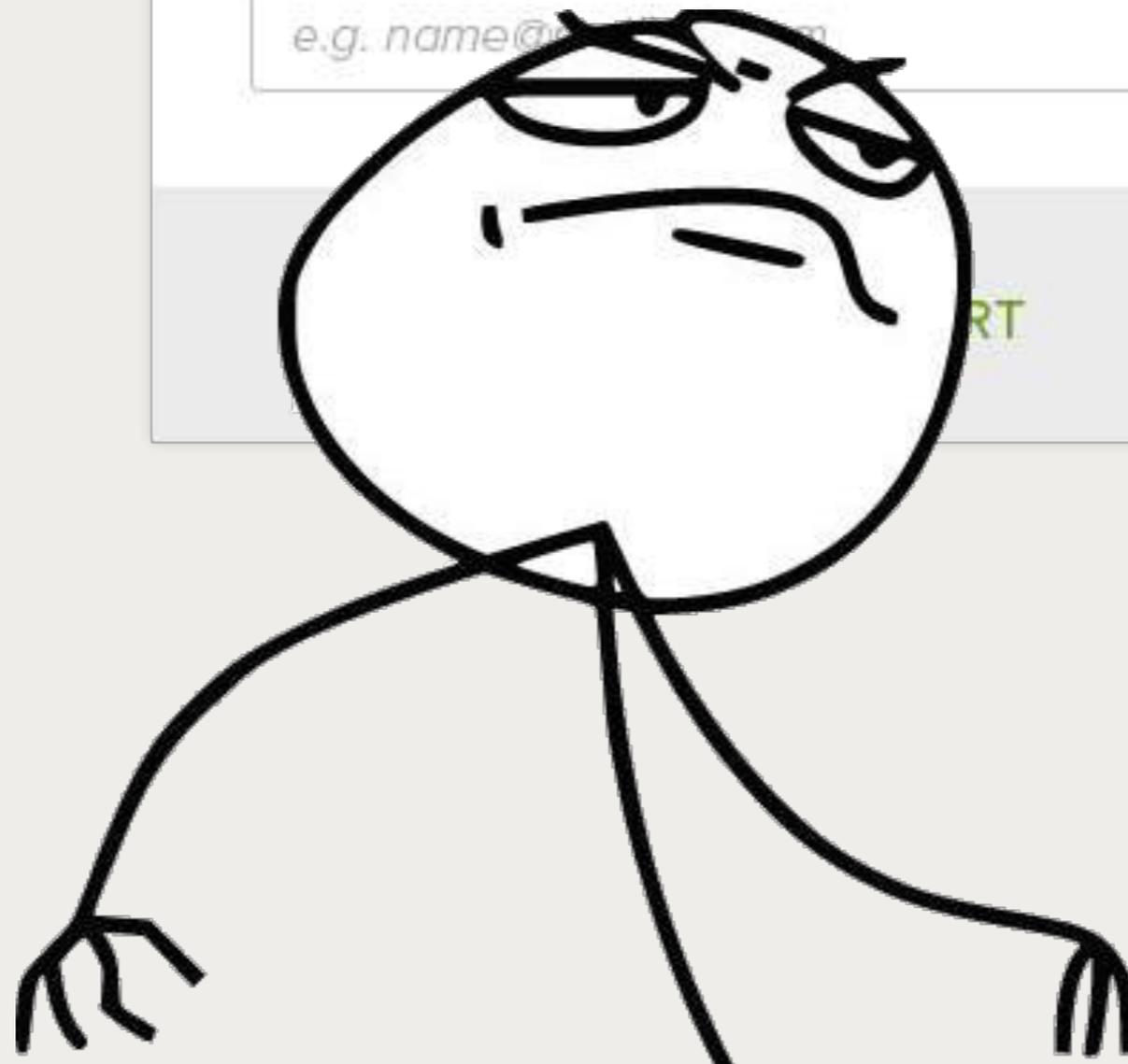


Hello, John.

We kindly ask you to complete this questionnaire in order to prepare for your next visit. This questionnaire should take about 30 minutes to complete.

Please enter your e-mail to start *

e.g. name@domain.com



RT

Важно

Ограничения помогают

Ищите аналоги в смежных областях

Не отступайте

Спасибо!



Вопросы?

kirill@ulitin.ru

fb.com/likeleto