DUNK FYFE

key word：

user activity

SDLC

CODE：

\*Scalable = different scale of operation 比如圣诞节 Black Friday

agile=delivery， money，the software 写好的code应该写好去应对这些change\*

reproducible=被hack了也可以继续用

reusable

complaint= health data and financial 我们的data要compliant to this regulation， data privacy uk和欧洲对于这些medical privacy需要approve才可以去学习这些data

affordable

SDLC：

1. Work visible to customers and stakeholders
2. development teams organize around the delivery of high-quality products
3. Better planning and scheduling of software
4. Better estimated of cost

SDLC Process:

SDLC methodologies (Agile)

1. Seek for customers’ needs and demands and make agile changes
2. FEATURE 看customer需要哪些feature 然后plan，作， test
3. software developer一般以两周为一个lifecycle 两周内要做完所有的事情看看是不是database有问题
4. customer needs are shifting
5. Agile 的坏处1 scope creep，customer可能会有源源不断的needs
6. 坏处2 Delivering value can make it difficult to deliver an integrated product

SDLC： Product Design

1. 有个图
2. DEFINE: the product’s purpose
3. DESCRIBE: what is to be built
4. DISCOVERY: gather input
5. ANALYSE

SDLC: Requirments

1. Storage in unordered basket costs storage 所以像tesco会有一个小时之后你的basket就会消失这种 so 为了 efficiency我们可以set 一个time limit
2. Describe the external interfaces; website need warehousing
3. 解决warehouse的问题可以Develop user story
4. MOSCOW - must should could want 有钱了做完了上一步就可以做下一步
5. \*Currency不一定每个都要 如果决定了要在英国做生意and you know没有人会用别的钱买 就没有必要implement 把时间花在对的地方 而且有些人看到自己熟悉的货币可能还不会买\*
6. When creating requirements 知道了这些之后就可以排优先级
   1. Who 谁要
   2. What 要啥
   3. Why 为啥做
   4. Test 不做test不知道有没有成功

SDLC： Design

Bloked可以限制只有2-3个东西可以block - operation effice- mange ppl

1. Wireframe 交互界面

good way to let the customer see

但是 tool like sigema可以做很好看的wireframe， the more is the wireframe， the more is the customer thinks its finished

project management 和 software team 要managed customer 不能让他们全看到，不然他们就觉得全做完了

2. Behavior Driven Design

1. 不techinical 就是听customer的

这个是站在user point of view的

要给分的

SDLC： Testing

1. PMA需要testing 的elements
2. 怎么去验证自己的code是correct的
3. operation testing一般会比较贵
4. AB test 卖便宜点 让customer来试一下 看看有什么可以改进的
5. smoke testing

从requirements开始

然后lifecycle吧啦吧啦吧啦吧啦吧啦

Why should it be tested? How should it be Tested?

DATABASE

1. is an organized collection of structured info or data, typically stored electronically in a collection?
2. Relational databases: a structure that allows us to identify and access data in relation to

Is stored in tables, the row is called records, and columns are types.

Match

为啥要match

1. accuracy of data， 每个人记录 data的方式不一样
2. economy of data
3. complex queries = using sql
4. scale of data 太大了
5. Trusted and well-known Techonology
   1. SQL is a skill set
   2. Web environments
   3. Variants

ACID  1. Atomicity - 要不是老的要不就是新的 不能有做一半的

1. Consistency - 同样的操作得到same answer
2. isolation - no overwrite
3. Durability - 要保存的时候就可以保存到disk里

 RDBMS

1. CommonActiities
   1. multi-user access
   2. add/update/delete
   3. query/extract
   4. forms
   5. visual representation
2. admin activites
   1. backup/restore 就算有durability但是还是得bp
   2. user management
   3. general data mgmt
   4. segregated data in commonality

\* PMA 可以做一个entity database 就是做一个table \*

\*[www.app.disgrams.net](http://www.app.disgrams.net)\*

1. Database design

要能找到所有的data

Example： Car Rental

sets of data； ppt里有

2. 要turn to database需要给每个data 一个unique name

each column is a field - each column must have a unique name

Each column has a type

varvhar是string的代称

int就是integer

Primary Key就是可以独特定位data的

fisrtname之前加一个cust-id，因为有的时候名字都一样啥的，你要单独区分不然的话付钱的时候咋知道哪个价格是给哪个 （不要用外面的data，自己编）

First – Second Form

SQL

1. DDL – data def

* Create-select
* Alter
* Drop
* Renames
* Truncate
* Comment

1. DQL – Data Query
   1. Select
2. DML – Manipulation （改变data）
   1. Insert
   2. Update
   3. Delete
   4. Merge
   5. Call
   6. Explain plain.
   7. Lock table
3. DCL – Data Control
   1. Grant
   2. Revoke

SESSION STRUCTURE

1. NoSQL database (不止sql)
   1. CAP Theorem
      1. Consistency(答案一样), availability（坏了是不是还能干）, partition tolerance （出问题了data怎么回到原样）
      2. 这三个只能选两个在relational data （consistency是king，另外两个选一个）
2. 一开始的时候是不知道需要什么样的database的
3. Key以外都是value

Data warehouse

1. ETL