Inferring Product Innovation Through Similarity Computation

P01A

Team's Roles

MINGCUN HUANG: Manager, Doomsayer

PEIQI HUANG: Tracker, Customer

YUHE JIANG: Programmer, Tester

YANXIAO LI: Programmer, Tester

ZIYUAN LIU: Programmer, Tester

KESHAV AGARWAL: Programmer, Tester

Project Introduction

Project idea: identify products that are related to our target product and then determine what new features can be imported.
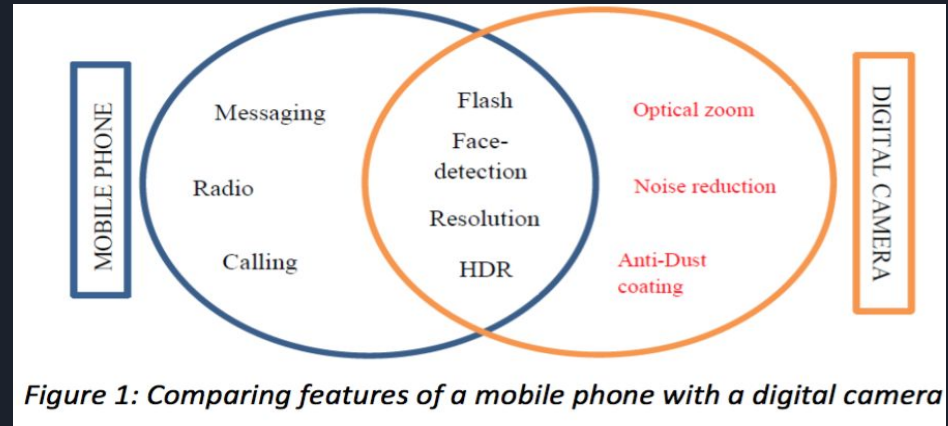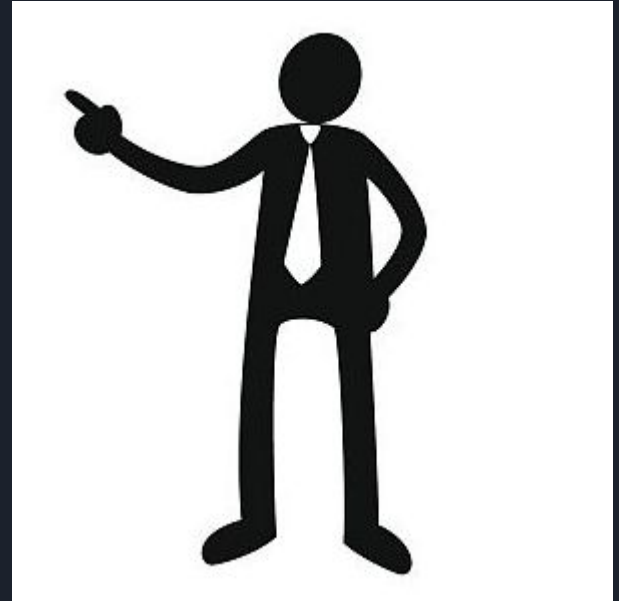

Figure 1: Comparing features of a mobile phone with a digital camera

User Story

- Product developer

- Database manager

Acceptance test

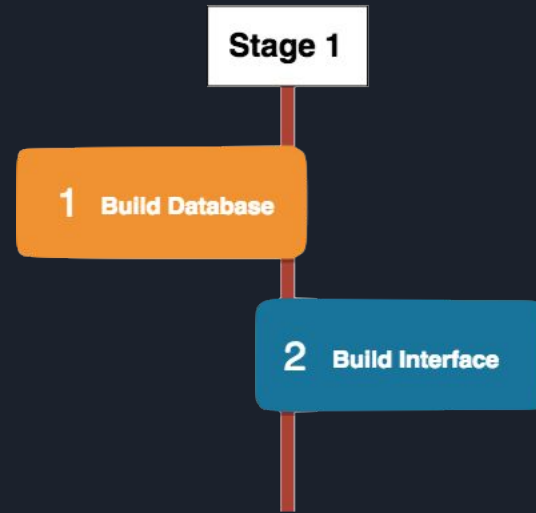|		
Novel features are correctly classified and displayed as a feature list.	Pass	
Features in the feature list are correctly divided into evolution list, revolution_1 feature list, revolution_2 feature list.	Pass	
Only the features of the product whose cosine similarity values are within the threshold will be classified accordingly.	Pass	

Monireh Alsadat Mirtalaie

5/10/2018

Project Overview

Using XP methodlogy: Small develpment cycle and frequent release

- php and Wampserver is used for building the database and interface
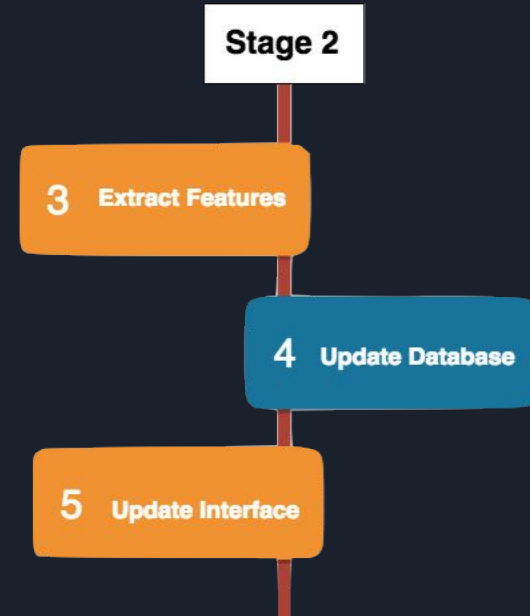
Stage 1

1 Build Database

2 Build Interface

Project Overview

Using XP methodlogy: Small develpment cycle and frequent release

- Python used for feature extraction
- Output csv files are uploaded to database
- Interface are modified to allow user set thresholds.
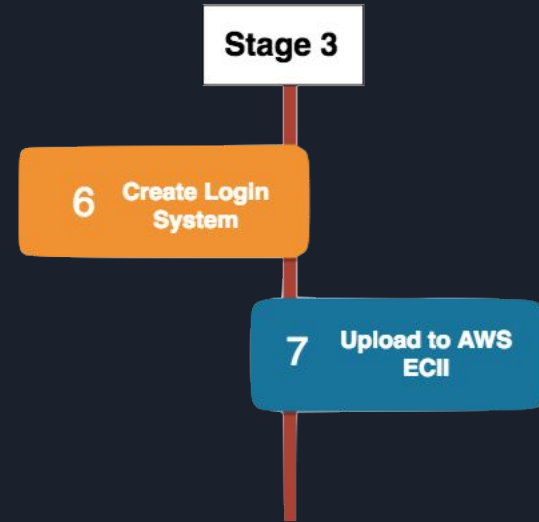
Stage 2

3 Extract Features

4 Update Database

5 Update Interface

Project Overview

Using XP methodlogy: Small develpment cycle and frequent release

- Only user registered are allowed to use the system
- Our website is avalible online!

XP Methodology
- Agile Software Development

- Whole team
  - Weekly group meeting: Manager
  - Weekly meeting with client: Customer
  - project management: Bitbucket & Google drive & Slack

- Test-Driven Development: Tester

- Pair Programming: Programmer

XP Methodology
- Weekly meeting

Branches	Week9 agenda.docx
Pull requests	meeting w11.pdf
Pipelines	Learning material.pdf
Deployments	meeting w10.pdf
Issues	Acceptance+test.docx
Wiki	Week8 agenda.docx
Downloads	meeting w8.pdf
Boards	image001.png
	meeting w7 .pdf
	Week7 agenda.docx

XP methodology
- Issue tracker

#40: Improving coding structure of python file - lev.py	⬆	⌃	RESOLVED	MIngcun	2018-10-02	3 days ago
#41: Create a login page	✔	⌃	RESOLVED	Keshav Agarwal	2018-10-14	3 days ago
#39: Improving coding structure of python file - cotim.py	⬆	⌃	RESOLVED	YUHE JIANG	2018-10-02	2018-10-08
#35: Enhance the coding structure of source code of Interface forth page	⬆	⌃	RESOLVED	YUHE JIANG	2018-09-27	2018-10-08
#36: Enhance the coding structure of source code of Interface fifth page	⬆	⌃	RESOLVED	Keshav Agarwal	2018-09-27	2018-10-03
#26: Develop 5 new user stories	✔	⌃	RESOLVED	PEIQI HUANG	2018-09-17	2018-10-03
#33: Enhance coding structure of the source code of Interface second page	⬆	⌃	RESOLVED	Yanxiao Li	2018-09-27	2018-10-03
#31: Develop user acceptance test	✔	⌃	RESOLVED	MIngcun	2018-09-27	2018-10-03
#38: Improving coding structure of python file - act.py	⬆	⌃	RESOLVED	Yanxiao Li	2018-10-02	2018-10-03
#34: Enhance the coding structure of the source code of the interface thrid page	⬆	⌃	RESOLVED	Ziyuan liu	2018-09-27	2018-10-03
#37: Improving coding structure of pyprod.py	⬆	⌃	RESOLVED	MIngcun	2018-10-02	2018-10-02

XP methodology
- Wiki

Wiki

project /

📁 **report**
📄 Home
📄 Individual Report 440589727
📄 Individual Report 460281951
📄 Individual Report 460484552
📄 Individual report 460008945
📄 Individual report 460306977
📄 Individual report 460467599
📄 Individual report
📄 XP understanding
📄 acceptance test
📄 group report
📄 user story uploaded
📄 user story

Wiki

project / Home

View | History | Edit

WEEK 1

- Weekly goal
  Select projects and form project teams.

- Weekly Contribution
  A preliminary understanding of the project objectives and the knowledge and skills required to complete the project.

- Documentation
  No documentation upload this week.

WEEK 2

- Weekly goal
  Meet with team members and communicate face-to-face with customers for the first time. Determine the project objectives.

- Weekly Contribution
  Complete the project group details and contract in class and make an appointment to meet with the client. Learn the main theory and role assignment of Extreme Programming.

- Documentation
  Project group details and contract
  Extreme programming understanding

Usability Test
- Example

Persona: P2 is a student doing IT related bachelor degree, he is interested in electronic devices and has creative ideas for its revolutions.
Task: User need to successfully select reference product and related product that will have a comparison in the future.
Time used: 1 minute 2 seconds.

Webpage	Use correctly?	Think Loud
First page – select reference product	Yes	The participant selected the item and said why there is only one product to select.
Second page – first level category selection of the related product	Yes	The participant selected "Electronic" and "Food, Beverages & Tobacco" and was wondering if he could select multiple categories.
Third page – second level category selection of the related product	Yes	User selected "Mobile" from "Electronic" and slid down to select "Food Items" from "Food, Beverages & Tobacco" then clicked next.
Fourth page – Third level category selection of the related product	Yes	"Samsung Galaxy S III" and "Snack Foods" were chosen from the given list and next button was pressed

Client Interaction

Good idea! But I should see the results after 70% of matching. Can you please go ahead with your idea and send me the results? If it ends up with too many errors, we will apply the exact match.

For example, if in the mobile phone we were able to find Flash> Flash mode, store Flash > flash modes > fill in mode , Flash > flash modes > fill in mode
(children of flash mode) as Evolution. It cannot be a revolution anymore.

Flash > flash modes > fill in mode
Flash> flash modes > flash off mode

Regards,
Monir
...

MM Monireh Alsadat Mirtalaie <Monireh.Mirtalaie@student.adfa.edu.au>
Fri 24/08, 2:16 PM

I don't think so! Please note the comma should be selected as the delimiter. So each child (level 3) is representing only one feature and it can be mentioned one time as either evolution, rev 1 or rev2.
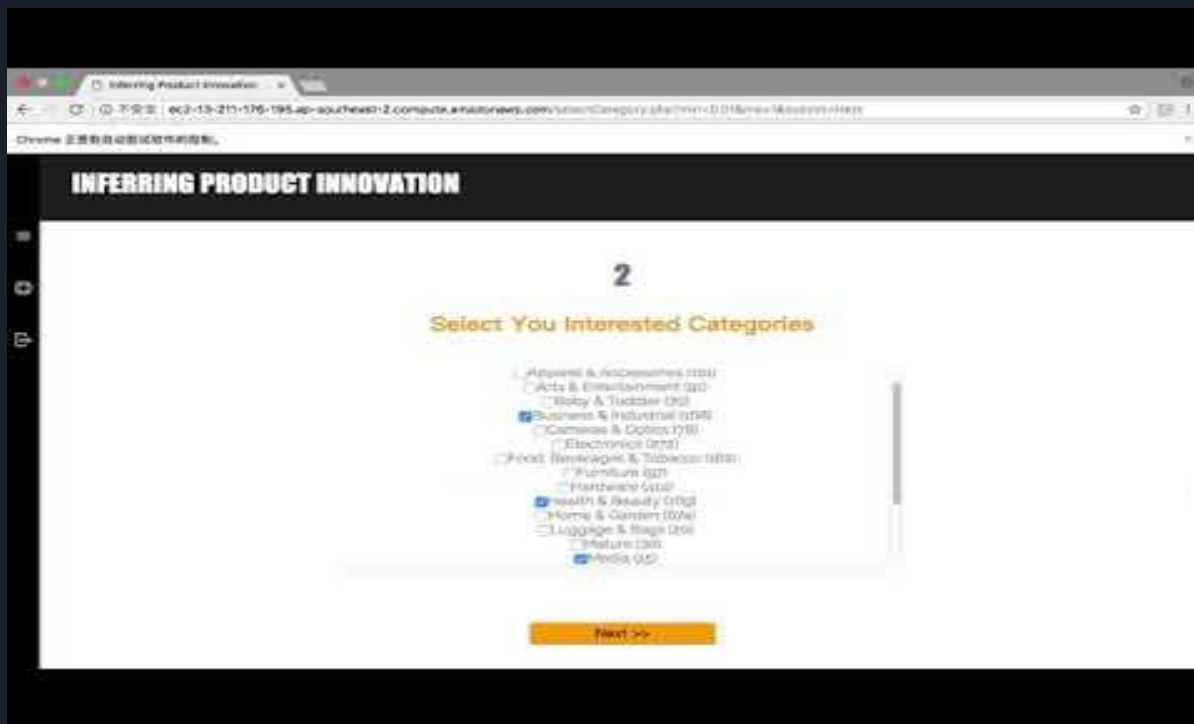
Regards,
Monir
...

Client Endorsement

The following activities are jointly conducted by both the Project Client and the Project Team	Completed (Y/N) Comments
Project review	
☑ Key stages completed, key milestones reached ☑ Deliverables meet requirements and specifications (and agreed changes)	Y
Handover complete for all project and product components, final sign-off issued by Project Client and Project Team	
☑ Project documentation (plans, schedules, requirements, specifications, communications, wikis, repositories) stored, transferred to and accepted by Project Client ☑ Product documentation (programs, product manuals) stored, transferred to and accepted by Project Client	Y
☑ All activities in the project are considered to have been completed	Y

Description	Suggested Mark	Notes and comments
Demonstration of actual working system and quality assurance of deployed system: the system is running effectively to implement the nominated user stories. Acceptance tests and results conform to expectation.	5 /5	
Satisfaction of overall group process, and communication: the group is well organized, progresses smoothly and communicated initiatively with clients.	5 /5	
Grand Total	10 **/10**	

Uni-test Demo

Thank You!