



FINAL REPORT

Three News

Final Project of Software Engineering

叁闻

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Conclusion and future work

The background of the slide is composed of several elements. On the left, there is a vertical bar with a black square at the top and an orange square below it. The number '1' is centered in the orange square. To the right of this bar is a wide horizontal band featuring a black and white photograph of a modern building's facade, characterized by strong geometric lines and a grid of windows. Below this band, the rest of the slide is white.

1


Introduction

Background and motivation



1.1 Project Background

Nowadays, plenty of news and information content platforms are **full of junk news and uncomfortable advertisement**, users are losing the comfort of the experience. Considering that, We are committed to solving the problem of poor user experience. Within our app, users can **enjoy the simplest news, no advertisement and get the news which is their preferences.**



The background of the slide is composed of several elements. On the left, there are two overlapping squares: a black one on top and an orange one on the bottom. A large white number '2' is centered within the orange square. To the right of these squares is a horizontal band featuring a black and white photograph of a modern building's facade, characterized by sharp geometric lines and a grid of windows. The rest of the slide is a plain white background.

2

Timeline

Time arrangement

2. Timeline

Week	Features
week 10	News Details
week 11	News "like", "unlike", "bookmark" features.
week 12	Spider for news.
week 13	News classification, news theme collecting.
week 14	Recommendation Algorithm.
week 15	Remain features.

2. Version

🔑 1.0
b30a1e5

Version1.0

 iAmCorey released this on 20 Apr · [55 commits](#) to master since this release

2019/4/20

- Implements Register/Login feature
- Implements Share feature
- Implements Camera feature

▶ Assets 2

Latest release

🔑 version-2.0

d677048

Verified

version-2.0

 Sustechzjh released this 11 days ago · [32 commits](#) to master since this release

Release version 2.0 implements:

1. spider for news
2. like and dislike function
3. bookmark function

The background of the slide is composed of several elements. On the left, there is a vertical arrangement of three squares: a black one at the top, an orange one in the middle, and another orange one at the bottom. The number '3' is centered within the middle orange square. To the right of these squares is a horizontal band featuring a black and white photograph of a modern building's facade, characterized by sharp geometric lines and a grid of windows. The rest of the slide background is white.

3

Features

Functions of our app

3.1 Log in and Register

📶 工程师开发 22:01 点击可关闭 🔊 100% 🔋



参闻

Username

Password



Confirm Password



LOGIN

CANCEL

NEXT

📶 工程师开发 22:01 点击可关闭 🔊 100% 🔋



参闻

Username

Password



REGISTER

CANCEL

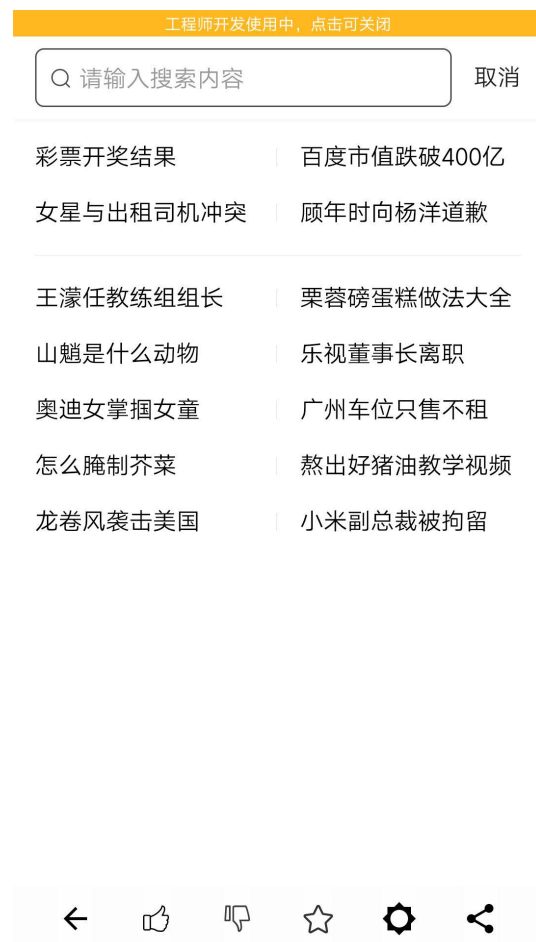
NEXT

3.2 News Details



When you select the news you can see the detail of the news.

3.3 Search for news



If you want to search some specific news, you can press the research button to get what you want.

3.4 Like and dislike



经济形势理性看：抓住用好新形势下的新机遇

林兆木

2019年05月23日07:32 来源：人民网 - 人民日报

■全球新一轮科技革命和产业变革蓬勃兴起，与我国加快转变经济发展方式形成历史性交汇，我国完全有条件构建起推动高质量发展和面向未来的现代化经济结构。

■美国严格限制向我国出口技术，虽然会给我们带来困难，但我国已具备进一步提升创新能力的基础和条件，可以发挥制度优势和市场优势，在关键核心技术创新上取得突破。



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If you like or dislike the news, you can press the “like” or “dislike” button, then it will affect the news we represent.

3.5 & 3.6 Collect and night mode



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If you want to collect some news, the “star” button will help you do this.

By the way, we devise the “night mode” for users to read without light.

3.7 Share



Of course, you can share
the news to your friends
or in moment if you like.

3.8 Recommend




We use NLP methods, machine learning and our special algorithm for recommending news to users

Machine Learning model: Multi-label Learning

3.9 User information updating

工程师开发使用中, 点击可关闭



CHANGE AVATAR

USERNAME

性别 男 ▼

行业 学生 ▼

出生日期 1970 ▼

UPDATE PROFILE

LOGOUT

You can update your user information.

which includes:

1. gender
2. occupation
3. birth year
4. User avatar

The background of the slide is composed of several elements. On the left, there are two overlapping squares: a dark orange one on top and a lighter orange one on the bottom. To the right of these squares is a black and white photograph of a modern building with a glass facade, viewed from a low angle looking up. The rest of the slide background is white.

4


Test

Tests for our app

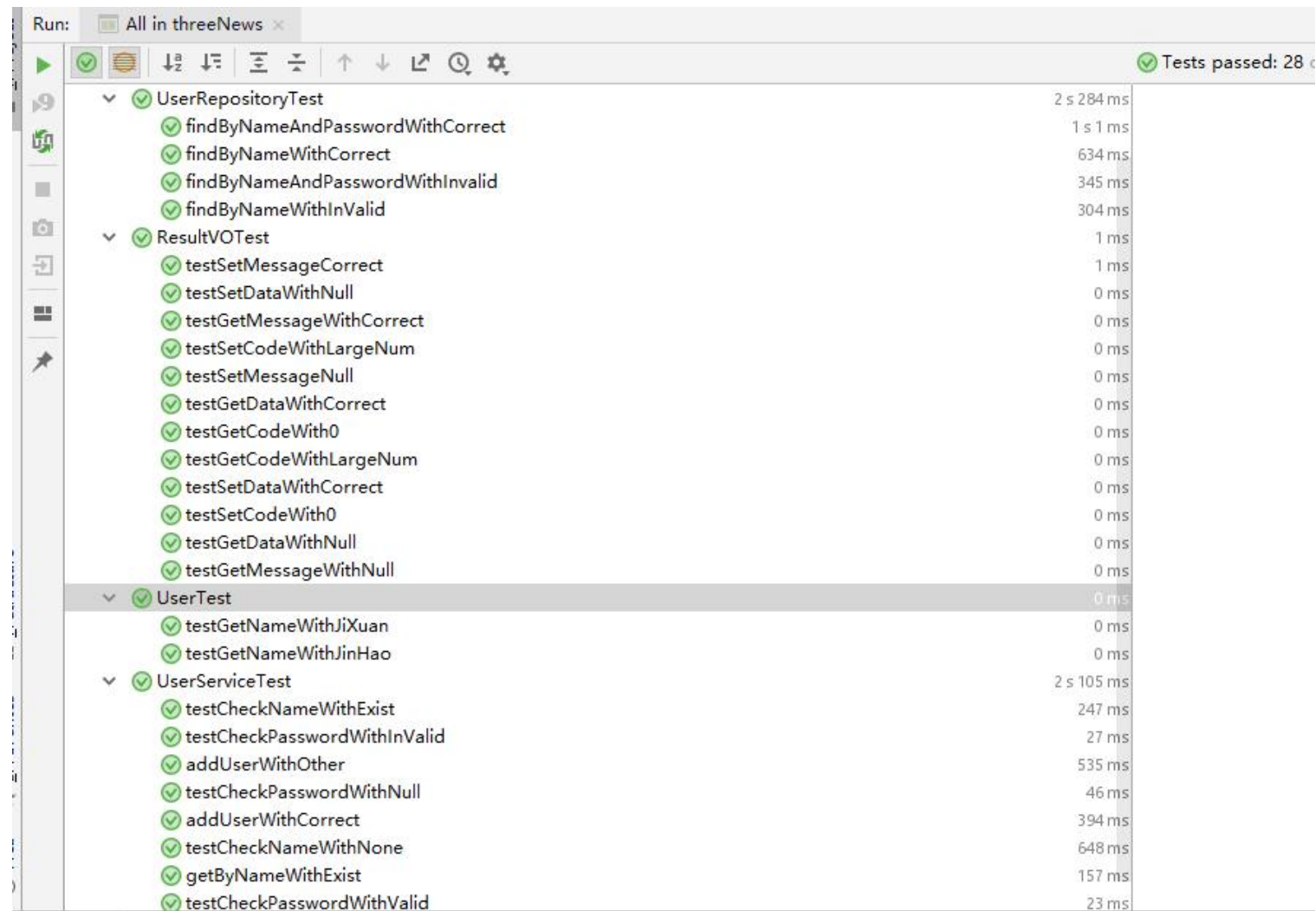


4.1 Test techniques

For testing, we only used unit test and scenario test.

- 1) Scenario testing is a software testing activity that uses scenarios: hypothetical stories to help the tester work through a complex problem or test system. The ideal scenario test is a credible, complex, compelling or motivating story the outcome of which is easy to evaluate
 - 2) Unit testing is testing of the smallest testable unit in software. Generally speaking, the meaning of unit in unit test should be determined according to the actual situation. For example, in C language, unit refers to a function, in Java, unit refers to a class, and in graphical software, it can refer to a window or a menu.
- 

4.2 Number of tests



Run: All in threeNews x		Tests passed: 28
✓	UserRepositoryTest	2 s 284 ms
✓	findByNameAndPasswordWithCorrect	1 s 1 ms
✓	findByNameWithCorrect	634 ms
✓	findByNameAndPasswordWithInvalid	345 ms
✓	findByNameWithInvalid	304 ms
✓	ResultVOTest	1 ms
✓	testSetMessageCorrect	1 ms
✓	testSetDataWithNull	0 ms
✓	testGetMessageWithCorrect	0 ms
✓	testSetCodeWithLargeNum	0 ms
✓	testSetMessageNull	0 ms
✓	testGetDataWithCorrect	0 ms
✓	testGetCodeWith0	0 ms
✓	testGetCodeWithLargeNum	0 ms
✓	testSetDataWithCorrect	0 ms
✓	testSetCodeWith0	0 ms
✓	testGetDataWithNull	0 ms
✓	testGetMessageWithNull	0 ms
✓	UserTest	0 ms
✓	testGetNameWithJiXuan	0 ms
✓	testGetNameWithJinHao	0 ms
✓	UserServiceTest	2 s 105 ms
✓	testCheckNameWithExist	247 ms
✓	testCheckPasswordWithInvalid	27 ms
✓	addUserWithOther	535 ms
✓	testCheckPasswordWithNull	46 ms
✓	addUserWithCorrect	394 ms
✓	testCheckNameWithNone	648 ms
✓	getByNameWithExist	157 ms
✓	testCheckPasswordWithValid	23 ms

The background features a decorative layout. On the left, there are two overlapping squares: a black one on top and an orange one below it. A large white number '5' is centered within the orange square. To the right of these squares is a horizontal band containing a black and white photograph of a modern building's facade, characterized by strong geometric lines and a grid of windows. Below this band, the rest of the slide is white.

5

Statical Analysis

Alpha-version system

5.1 Static analysis tools

CheckStyle Audit
Designed for use with [CheckStyle](#) and [Ant](#).

Summary	
Files	Errors
15	0

Files	
Name	Errors
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\AccountFragment.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\BrowserFragment.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News>LoginFragment.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News>MainActivity.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NavigationHost.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NavigationOnClickListener.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NewsCardRecyclerViewAdapter.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NewsCardViewHolder.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NewsGridFragment.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NewsGridItemDecoration.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\RegisterFragment.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\RegistrationThreeNewsApplication.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NetworkImageRequester.java	0
G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NetworkNewsEntry.java	0
G:\Github_Repository\main-project-repository-soad\src\test\java\com\google\code\labs\mdc\java\three\News\ExampleUnitTest.java	0

File G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\AccountFragment.java	Line
Error Description	
Back to top	
File G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\BrowserFragment.java	Line
Error Description	
Back to top	
File G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News>LoginFragment.java	Line
Error Description	
Back to top	
File G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\MainActivity.java	Line
Error Description	
Back to top	
File G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NavigationHost.java	Line
Error Description	
Back to top	
File G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NavigationOnClickListener.java	Line
Error Description	
Back to top	
File G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NewsCardRecyclerViewAdapter.java	Line
Error Description	
Back to top	
File G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NewsCardViewHolder.java	Line
Error Description	
Back to top	
File G:\Github_Repository\main-project-repository-soad\src\main\java\com\google\code\labs\mdc\java\three\News\NewsGridFragment.java	

Applying rule set filter for exclusions: The rule "UncommentedEmptyMethod" has been renamed to "UncommentedEmptyMethodBody". Please check the documentation for more details.
Applying rule set filter for exclusions: The rule "UncommentedEmptyMethod" has been renamed to "UncommentedEmptyMethodBody". Please check the documentation for more details.

BUILD SUCCESSFUL in 8s
1 actionable task: 1 executed
22:25:23: Task execution finished 'pmd'.

5.2 Static analysis tools

[FindBugs](#) Report

Project Information

Project:

FindBugs version: 3.0.1

Code analyzed:

- G:\GitHub_Repository\main-project-repository-ood\app\build\intermediates\javac\debug\compileDebugJavaWithJavac\classes

Metrics

10415 lines of code analyzed, in 286 classes, in 34 packages.

Metric	Total	Density*
High Priority Warnings		0.00
Medium Priority Warnings		0.00
Total Warnings	0	0.00

(* Defects per Thousand lines of non-commenting source statements)

Contents

- [Details](#)

Summary

Warning Type	Number
Total	0


Warnings

Click on a warning row to see full context information.

Details



5.3 Scenerios

- Whoever and whenever you want to read news you can use our app.
 - Users with different kinds of occupations want to read different news, we have divised an occupation information to represent news more accurately.
 - When people have sparse time, they can use our app for news reading
- 

The background of the slide is composed of several elements. On the left, there is a vertical bar with a black top section and an orange bottom section. The number '6' is centered in the orange section. To the right of this bar is a horizontal band featuring a black and white photograph of a modern building's facade, characterized by strong diagonal lines and a grid of windows. The rest of the slide is a plain white background.


6

Conclusion and future work



6.1 Conclusion


We have implemented most of features we listed. Within our apps, users can enjoy the simplest news, no advertisement and get the news which is their preferences. But there are still a few features we didn't reach.

- Dialogue type news presentation: UI Acts likes talking with someone.
 - Import a file: To upload avatar.
- 



6.2 Future Work

Answers for questions:

- We have learned test, static analysis, ui design, tensorflow.
 - Different test scenarios, using some new techniques, beautiful ui design
 - Avator, collection
 - There are many problems in fragment.
- 



Q&A

Thanks For
Listening!