



Ke sana ke mari, tanya di sini

- Please stand by
Start the stopwatch
We have 20 minutes

The Ideation



Mission statement:
Helping people to get
friendly traffic direction

Jabodetabek is a traffic mess

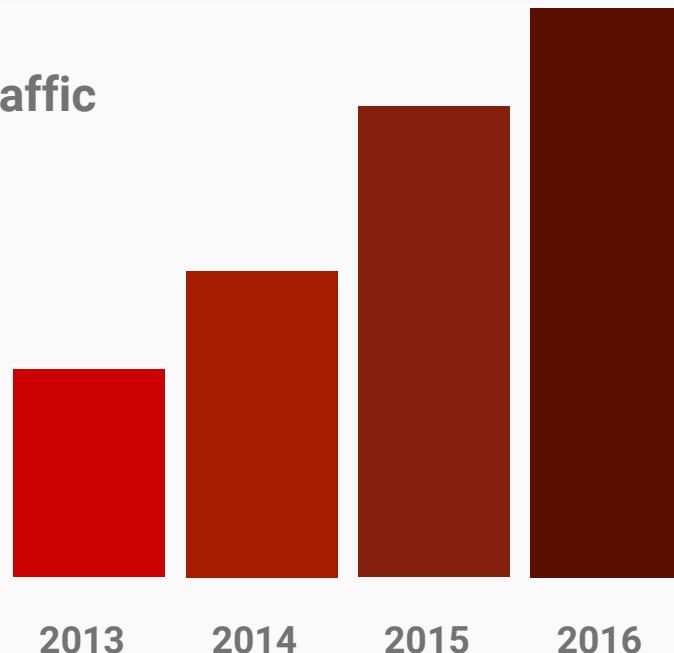
Unstoppable growth in personal transportation and traffic

Public transportation infrastructure is not good

It often causes direction confusion

Too many data yet so little information

Navigation apps are not helping much either



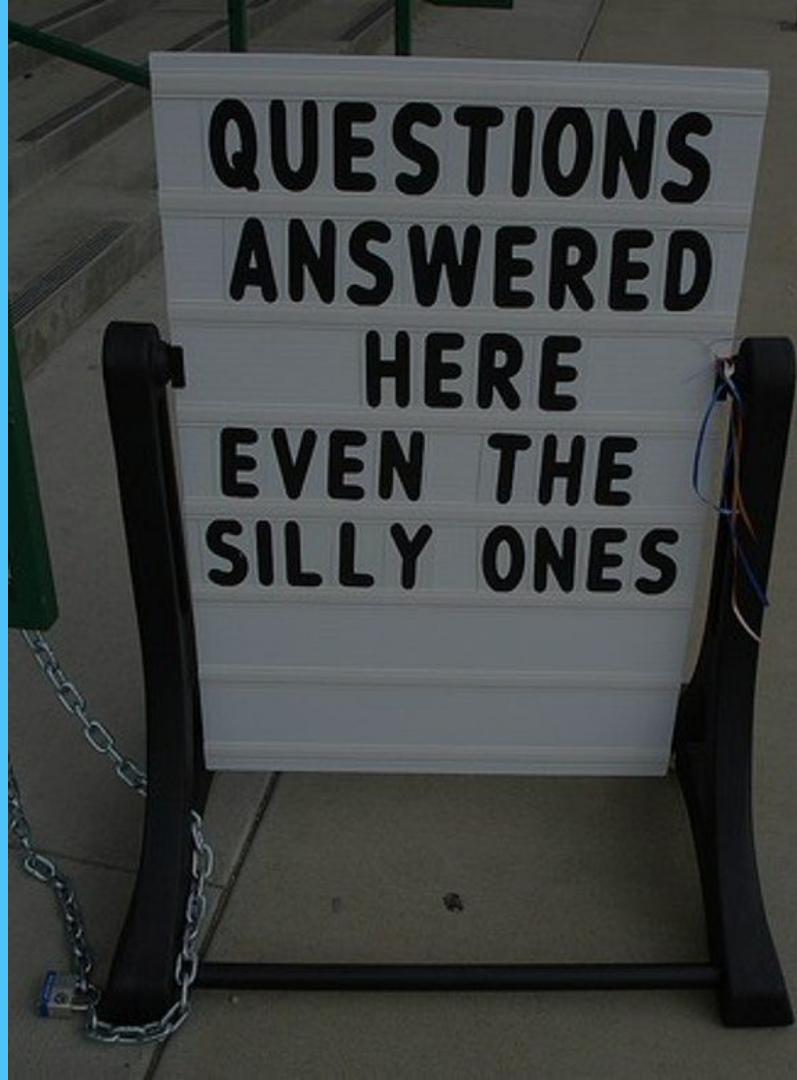


The solution

A community-driven, answer-focused, interactive social forum to find the easiest way to commute around Jabodetabek

Method:

Through friendly
Q&A discussion
format



How it works

Ask a question

Simply ask your desired question



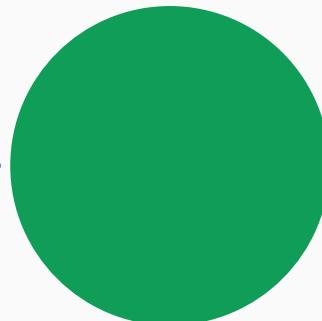
Interact

Let the community help you with their answers



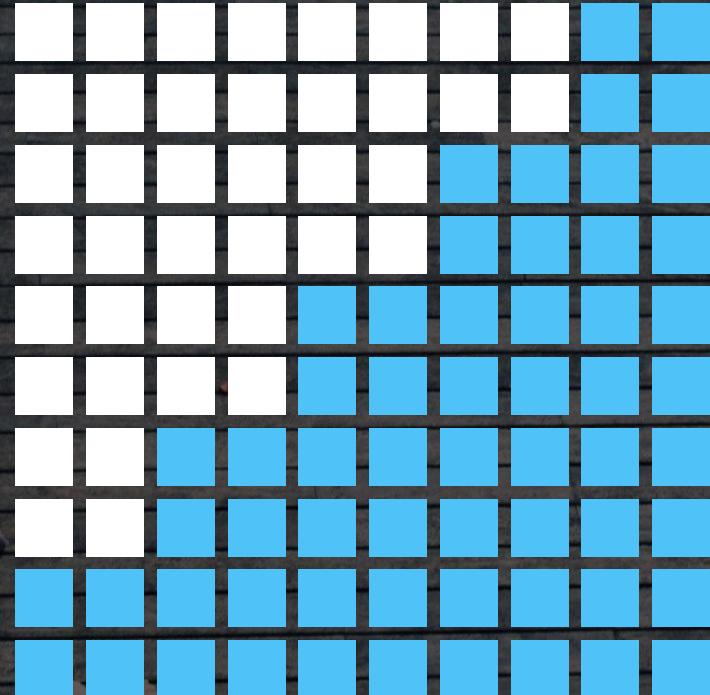
Commute Effortlessly

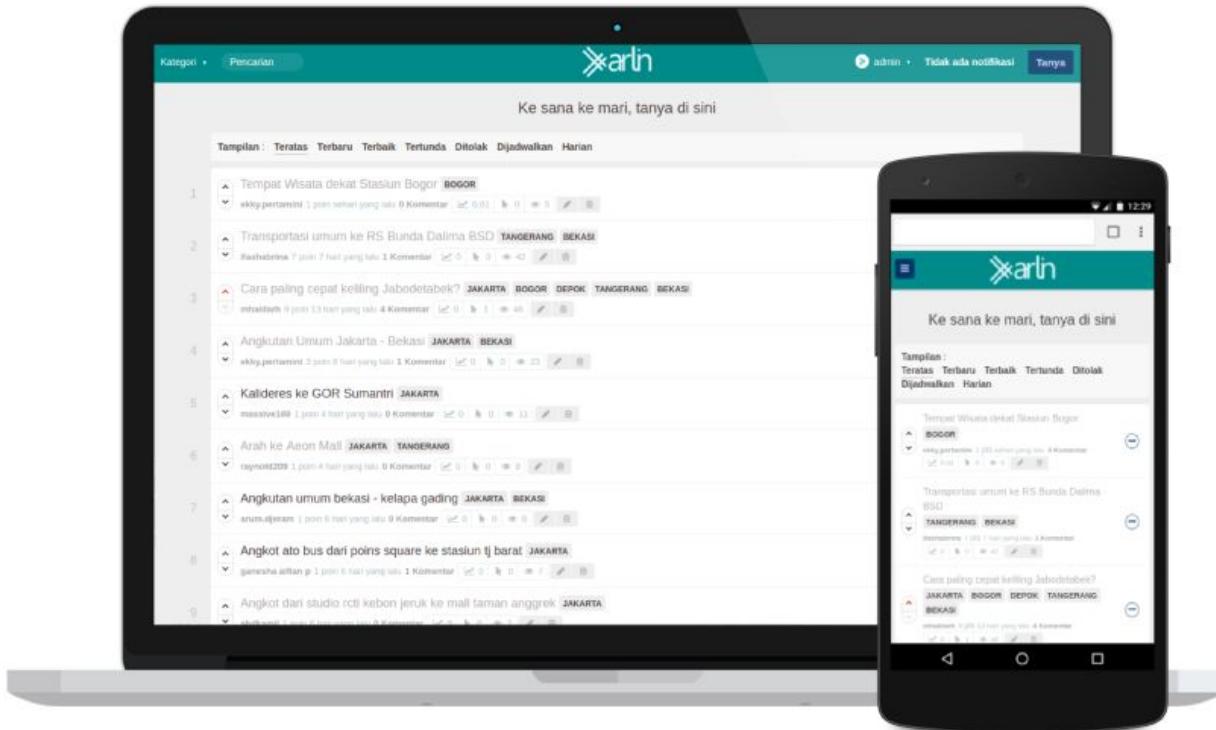
Get the best possible answer and you are ready to go!



Why resolve the problem now?

As Indonesia's current mobile and mobile-ready generation, we are simply connected than ever before.







The Team and Roles

"Why are we the ones to solve the problem we identified"



Ekky Pramana

Experienced Europe
Backpacker

Ideator, Chief Designer,
Partial Front End Developer



M Haidar Hanif

Urban Adventurer and
Hitchhiking Passenger

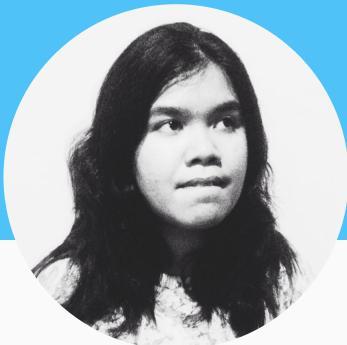
Advisor, Integrator,
Full Stack Engineer



Muhammad Patria

Professional Hitchhiker,
Passenger

Documenter, Tester. Partial
Back End Developer



Ruth Theodora

South Jakarta

Designer, Documenter,
Tester

Appendix

Show the audience you anticipated their questions

Leave room for Q&A, but use the Appendix as a way to show that you both thought about those questions and have solid answers with supporting information. Let the audience test their understanding of the problem and the solution you've outlined - questions give them a chance to talk themselves into your approach, and give you a chance to show mastery of the subject.

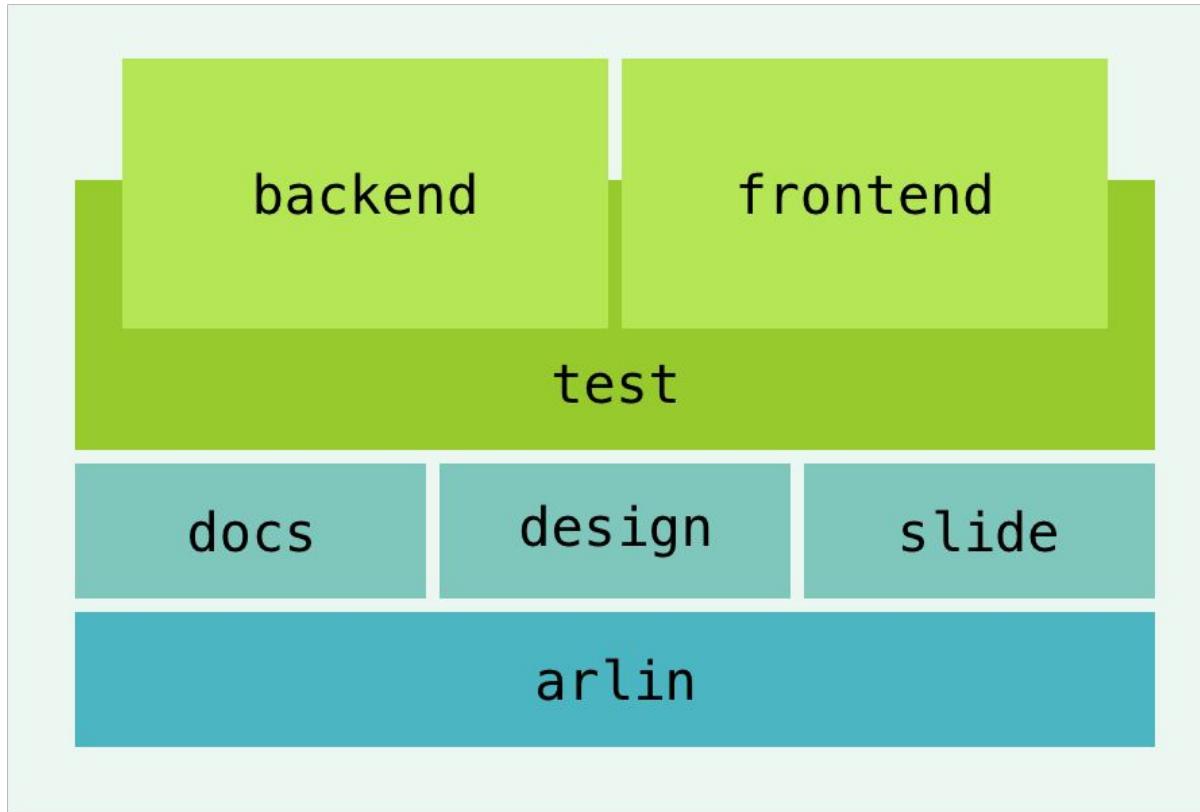
The background of the slide is a photograph of a city skyline at dusk or night. The Empire State Building is prominent in the center, its Art Deco spire reaching towards a sky filled with wispy clouds and a warm gradient from orange to blue. Other skyscrapers are visible, their windows glowing with lights. In the foreground, the dark silhouettes of buildings create a sense of depth.

The Project Management and Structure

Agile
Kanban
Minimal
GitHub Flow
ZenHub Board & Burndown

User Acceptance Test
Usability Test
Unit, Functional, E2E Test
Continuous Integration (CI) Build and Test

asde-michi =  arlin



GitHub, Inc. [US] <https://github.com/gunadarma-academy/asde-michi#boards?repos=53564832>

Repos (1/4) show all Labels Milestones Assignees Search (/) New Issue

Backlog Ready In Progress Closed Done

21 Backlog 1 13 Ready 3 29 In Progress 5 209 Closed 52 0 Done 0

asde-michi #50 Product Launch of Arlin v2

asde-michi #46 Prepare the slide for final presentation

5 documentation

asde-michi #53 Group deliverables report of each SOW

5 documentation enhancement

asde-michi #51 Create success criteria for this project

3 documentation

asde-michi #46 Implement frontend based on the new designated routes, API, ...

8 app enhancement frontend

asde-michi #60 Test frontend app with selected test suite

5 app frontend

asde-michi #49 Implement backend based on the new designated API and data

8 app backend enhancement

asde-michi #54 Test backend app with Mocha and Chai

5 app backend

asde-michi #61 Create Usability Test Documentation

3 documentation

asde-michi #59 Calculate and analyze the result of online questionnaire (pa...)

5 discussion documentation

asde-michi #8 Patria's Node.js CRUD and MongoDB learning

8 app backend enhancement

2 discussion documentation

asde-michi #48 Streamline testing suite for backend and frontend

5 app backend enhancement ...

5 app discussion ...

asde-michi #45 Create and spread online questionnaire (Part B)

5 app discussion ...

asde-michi #44 Create and spread online questionnaire (Part A)

5 app discussion ...

asde-michi #57 Create the online spreadsheets for calculating and analyzing...

app documentation

asde-michi #42 Data entry for Arlin initial content (Part A)

1 app discussion

E Filter by this epic

21 Epic app backend design

documentation frontend



Project Management Setup



Edit Milestone

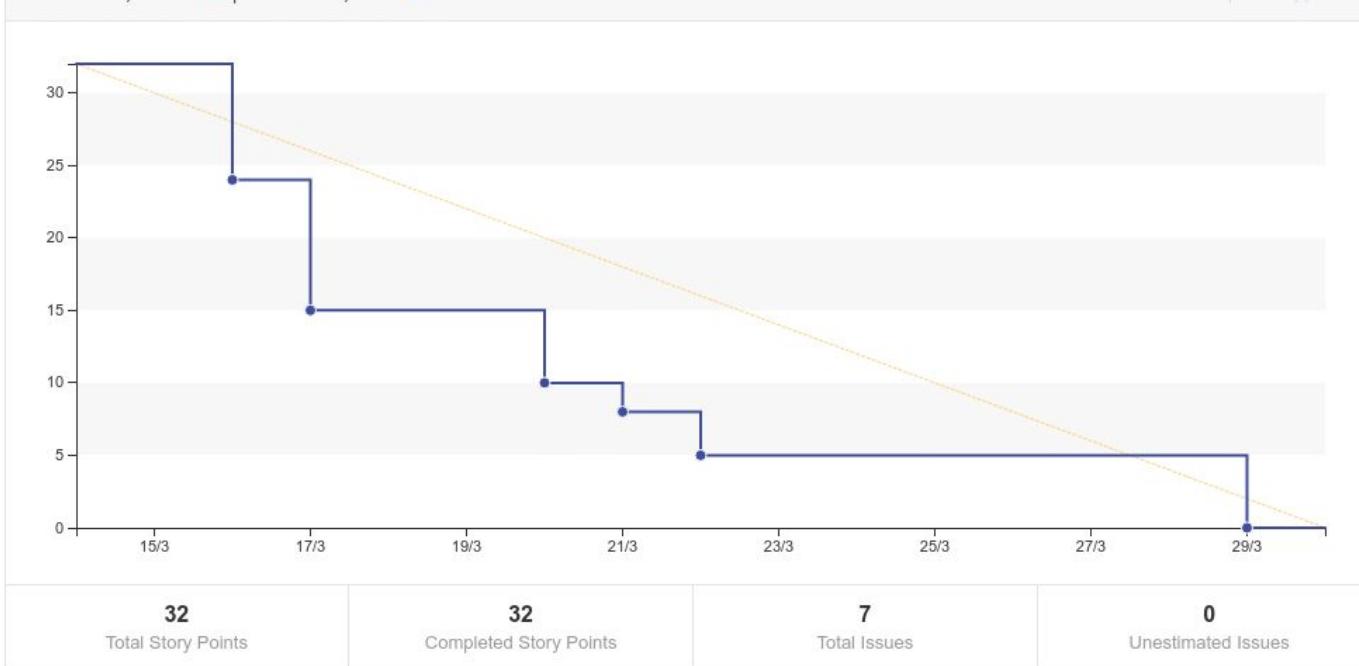


Change Milestone ▾

Setup the preferred Project Management.

Start: Mar 14, 2016 [Edit](#) | Due: Mar 30, 2016 [Edit](#)

powered by ZenHub



Project Management Setup

Repository

Issues

Story Points

Include slide inside main repo #3

[Edit](#)[New Issue](#)[Closed](#)

mhaidarh opened this issue on Mar 16 · 0 comments



mhaidarh commented on Mar 16

Gunadarma Academy member



- Kind: Statement of Work
- Title: Include slide inside main repo
- Author: M Haidar Hanif
- Affiliation: Michi
- Date: 2016-03-16
- Version: 0.1

SOW

Overview

Making it easy to make the slide for Michi Team by separating the repo.

Tasks

- Create asde-michi-slide repo at <https://github.com/gunadarma-academy/asde-michi-slide>
- Use git submodule or subrepo

Deliverables

Labels

enhancement

Milestone

Project Managemen...

Estimate

1

Assignee



mhaidarh

Epic

Not inside an Epic

Notifications

[Unsubscribe](#)

You're receiving notifications because you modified the open/close state.

1 participant

Snap CI | gunadarma X Arlin by Michi

https://snap-ci.com/gunadarma-academy/asde-michi-backend/branch/master

gunadarma-academy/asde-michi-backend (master) Talk to us mhaidarh

Pipelines

Pull Requests Stage History Notifications Unwatch Configuration CCTray

#38 C Apr 25th 2016 04:42

2aac731 Install nodemon for node watch...
2f535a5 Create default admin config Cre...
72a1deb Rename app to server and index...
9d0e6ec Streamline global hooks configu...

15 hours ago 45s PASSED DEV logs by mhaidarh C

4 minutes ago 1m PASSED STAGING logs by mhaidarh C

2 minutes ago 59s PASSED PRODUCTION logs by mhaidarh C

#37 C Apr 25th 2016 02:55

d0c55d1 Refine edit test and delete grava...
6aeb4e4 Breakline JSON data
9f408a8 Try to move gravatar hook into ...
...

17 hours ago 36s PASSED DEV logs C

STAGING C

PRODUCTION C

#36 C Apr 25th 2016 01:11

5a0f570 Fallback requireAuth to restrictT...
cb1d764 User and Question service use ...
f60fa69 All services connect to MongoDB...
4ea4381 Enhance hooks for auth, user, q...

19 hours ago 34s PASSED DEV logs C

STAGING C

PRODUCTION C

#35 C Apr 25th 2016 00:49

ae91ecc Install mongoose and its featur...
02f4cc0 Create mongoose model for que...

19 hours ago 2m PASSED DEV logs C

STAGING C

PRODUCTION C

Achieved Milestones

Where we are in the process and what's left to tackle

1. Project Management Setup

March 14, 2016 - March 30, 2016

2. Product Roadmap for Arlin v1

March 14, 2016 - April 17, 2016

3. Learning the Basics

March 18, 2016 - March 23, 2016

4. Initial UI/UX Design

March 20, 2016 - April 8, 2016

5. Initial Technology Stack

March 20, 2016 - April 20, 2016

6. User Generated Content

April 17, 2016 - April 20, 2016

7. User Acceptance Testing

April 18, 2016 - April 25, 2016

8. Application Testing

April 20, 2016 - April 27, 2016

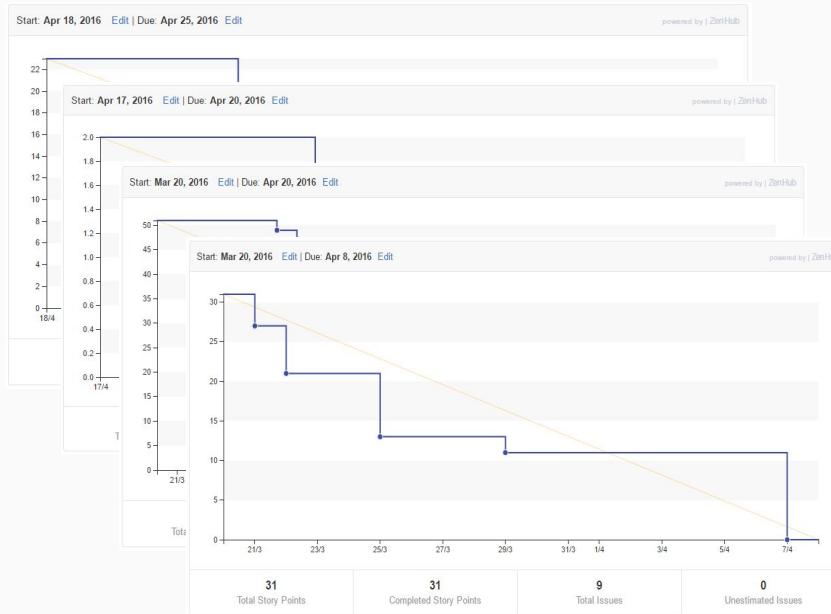
9. Product Roadmap for Arlin v2

April 18, 2016 - April 27, 2016

(could also be in going)

Milestones and Burndown Reports

Overall progress reports



The milestones and burndown also contain all SOWs

Deliverables Reports

All SOWs report

Arlin by Michi Report: Deliverables

It contains all SOWs from each milestones, including its burndown charts. All SOWs that have been reported in this document is the delivered SOWs.

Project Management Setup

March 14, 2016 - March 30, 2016

Start: Mar 14, 2016 Edit | Due: Mar 30, 2016 Edit



The burndown chart shows a step function starting at 32 story points on March 14, 2016. It drops to 15 by March 17, 2016, 10 by March 20, 2016, 8 by March 21, 2016, and finally reaches 0 by March 29, 2016. A diagonal line represents the ideal burndown rate.

| Total Story Points | Completed Story Points | Total Issues | Unestimated Issues |
|--------------------|------------------------|--------------|--------------------|
| 32 | 32 | 7 | 0 |

#1: Generate and improve our ideas

Each team member had to generate and explain their idea. All ideas has been written to IDEAS file. Some ideas would be eliminated until we got one good and proper idea.

#2: Choose a project management and software development methods

We decided our project management and software development methods. We considered Minimal Agile Kanban with GitHub and Waffle as our suitable project management.

The document has been pushed to our main repo in `reports` folder

→ <http://arlin.link>

- Survey: <http://bit.ly/arlinmichi>
- This slide: <http://bit.ly/arlindeck>

- Parent Repo: <https://github.com/gunadarma-academy/asde-michi>
- SOW: <https://github.com/gunadarma-academy/asde-michi/issues>
- Slide: <https://github.com/gunadarma-academy/asde-michi-slide>
- Test: <https://github.com/gunadarma-academy/asde-michi-test>
- Backend: <https://github.com/gunadarma-academy/asde-michi-backend>
 - ◆ Legacy: <https://github.com/gunadarma-academy/asde-michi-backend-legacy>
- Frontend: <https://github.com/gunadarma-academy/asde-michi-frontend>

The Design



Wireframes

LOGO

Explanation about arlin

if Needed

LOGIN

0 answer

asked by ruth

Time stamp

Can I ask you a question?

LOGO

username

LOGIN

LOGIN

Can I ask you a question?

LOGO

Background

ASK

Recent Questions

Q #1

Q #2

Q #3

Can I ask you a question?

LOGO

LOGO

Recent Questions

Q #1

Q #2

Q #3

Q #4

Q #5

LOGO

< back

ADD A QUESTION

TITLE

POST DESCRIPTION

ASK

LOGO

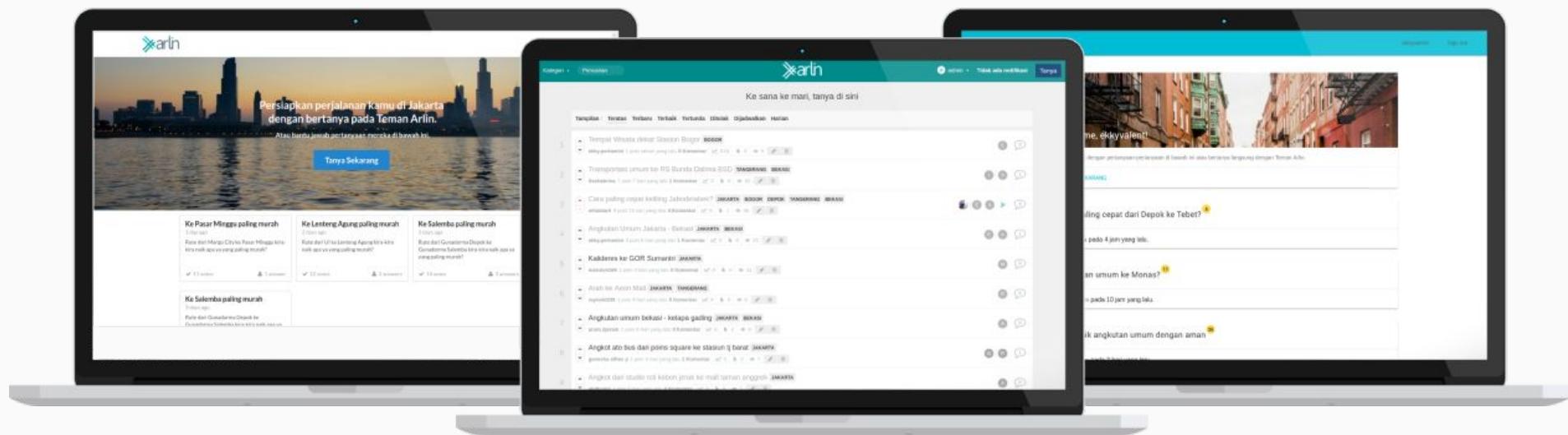
< back

QUESTION

YOUR ANSWER

SUBMIT

Attempted Interactive Web Mockup(s)



Live Production

Kategori ▾ Pencarian

 admin ▾ Tidak ada notifikasi Tanya

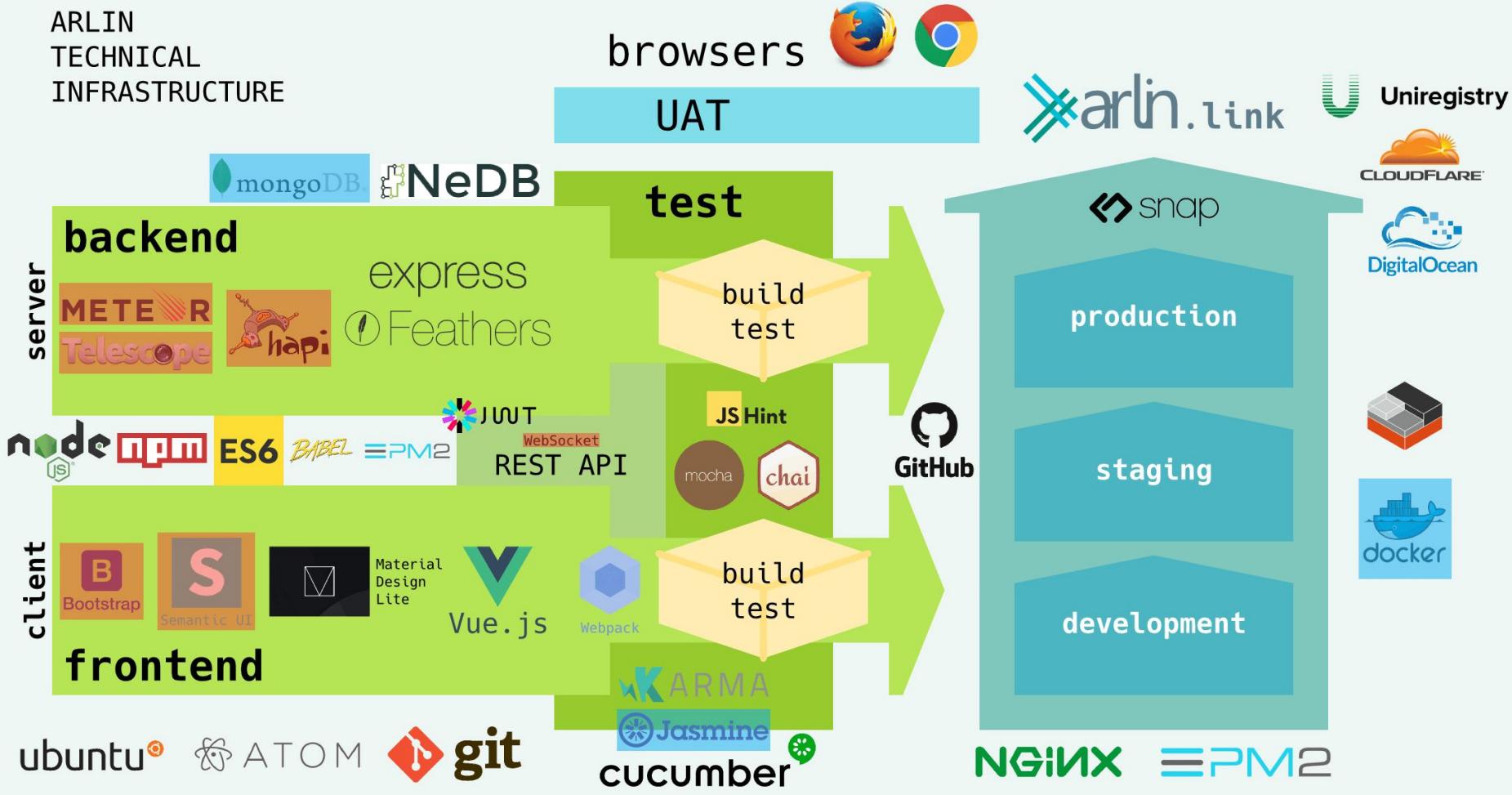
Ke sana ke mari, tanya di sini

Tampilan : Teratas Terbaru Terbaik Tertunda Ditolak Dijadwalkan Harian

| | | | | | | | | |
|---|---|------|---|----|--|--|---------|--|
| 1 | Tempat Wisata dekat Stasiun Bogor BOGOR ekky.pertamini 1 poin 2 jam yang lalu 0 Komentar | 0.14 | 0 | 2 | | | E 0 | |
| 2 | Transportasi umum ke RS Bunda Dalima BSD TANGERANG BEKASI ifashabrina 7 poin 6 hari yang lalu 1 Komentar | 0.01 | 0 | 41 | | | I S 1 | |
| 3 | Cara paling cepat keliling Jabodetabek? JAKARTA BOGOR DEPOK TANGERANG BEKASI mhaidarh 9 poin 12 hari yang lalu 4 Komentar | 0 | 1 | 46 | | | E A 4 | |
| 4 | Angkutan Umum Jakarta - Bekasi JAKARTA BEKASI ekky.pertamini 3 poin 7 hari yang lalu 1 Komentar | 0 | 0 | 23 | | | E A 1 | |
| 5 | Kalideres ke GOR Sumantri JAKARTA massive169 1 poin 3 hari yang lalu 0 Komentar | 0 | 0 | 11 | | | M 0 | |
| 6 | Arah ke Aeon Mall JAKARTA TANGERANG raynold209 1 poin 3 hari yang lalu 0 Komentar | 0 | 0 | 8 | | | R 0 | |
| 7 | Angkutan umum bekasi - kelapa gading JAKARTA BEKASI | | | | | | A 0 | |

The Technology

ARLIN TECHNICAL INFRASTRUCTURE

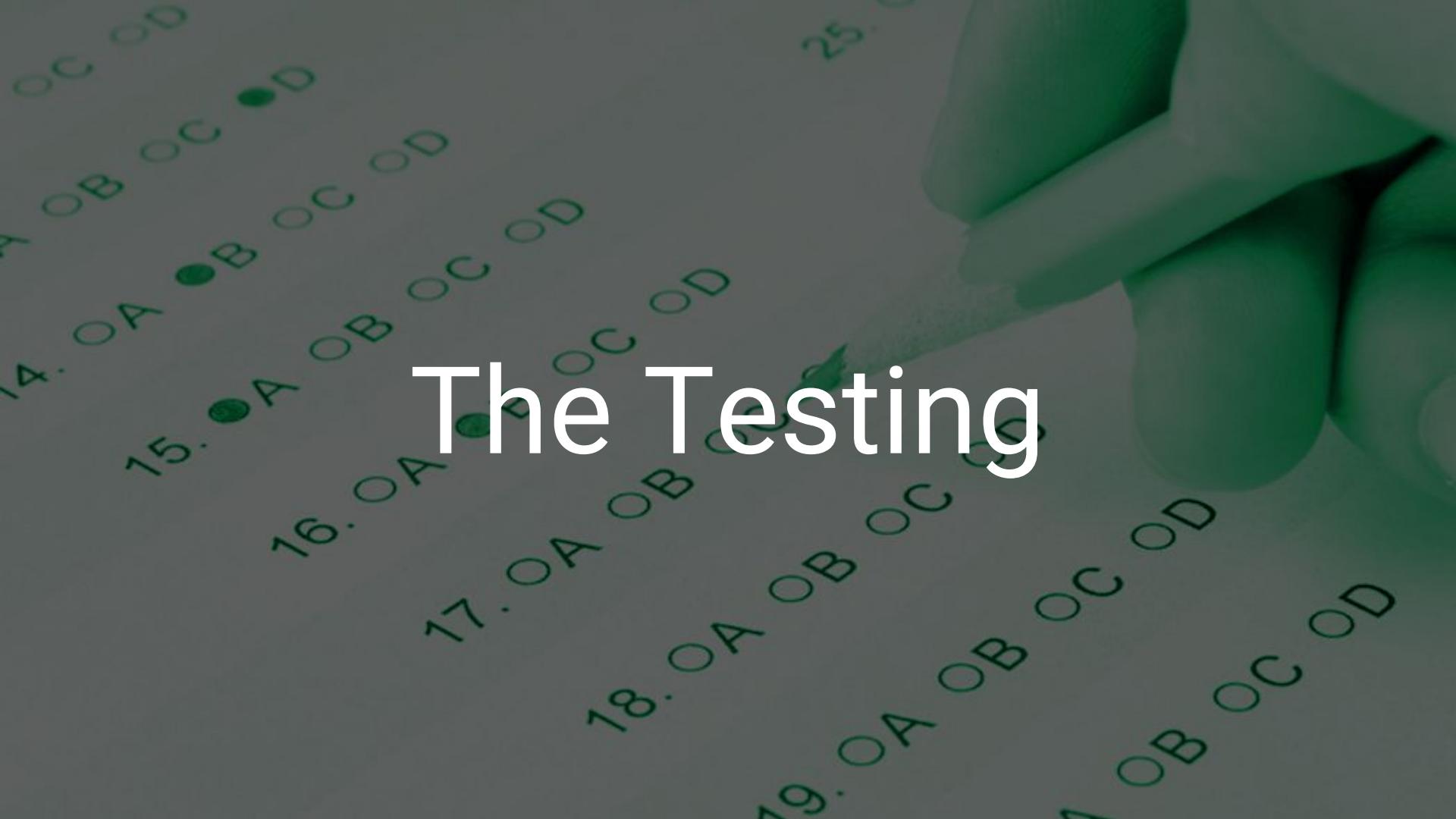


Well, let's dial down a bit.

- 1) Requirements
- 2) Data Schema
- 3) API Endpoints
- 4) Routes

- 1) Database and Services
- 2) Backend/Server
- 3) Frontend/Client
- 4) Process Manager
- 5) Build Pipeline in CI/CD
- 6) VM Server (VPS)
- 7) DNS and Public Domain

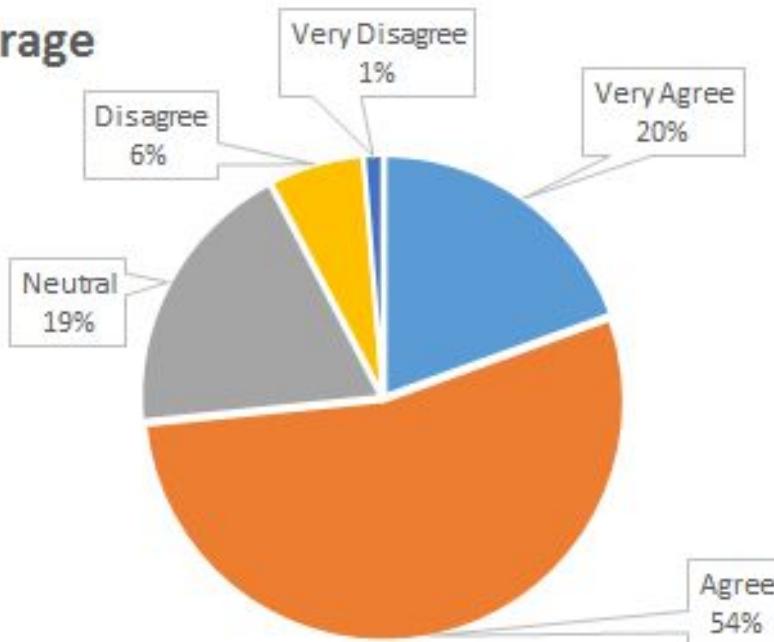
The Testing



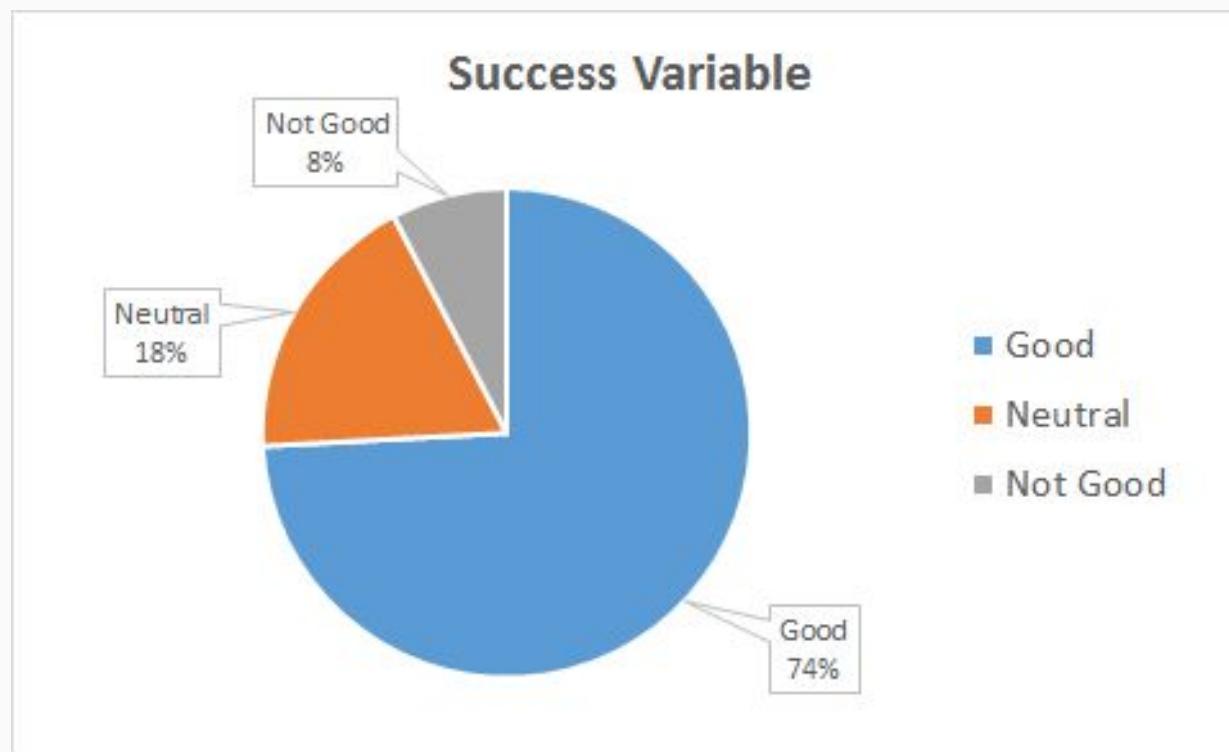
UAT Results and Analysis

Likert Scale Average

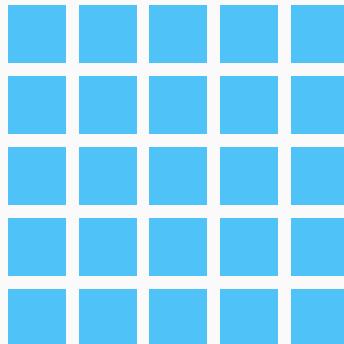
- Very Agree
- Agree
- Neutral
- Disagree
- Very Disagree



UAT Results and Analysis



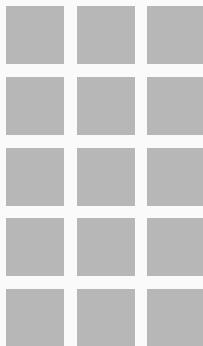
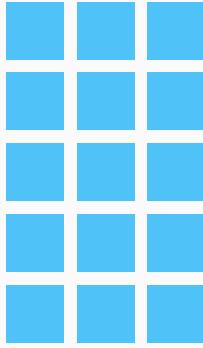
Scenario for E2E and Usability Tests



```
list_questions.feature *
```

```
1 Feature: List all available questions
2
3   As a visitor or user of Arlin,
4   I am able to view all the available questions
5   So that I can find out if there's a case I'm interested in
6
7   Background:
8     Given the app already retrieve all the questions list
9
10  Scenario: User is able to see all the available questions
11    When user accesses the home page
12    Then user is able to see all the questions
13
14  Scenario: user is able to read the details of the 1st question
15    When user clicks the 1st question on the list
16    Then user is able to read the 1st question details
17
```

Unit/Functional Tests and Results



```
app.test.js
1  'use strict';
2
3  const app = require('../src/app');
4  const request = require('request');
5  const chai = require('chai');
6  const expect = chai.expect;
7  const assert = chai.assert;
8  const should = chai.should();
9
10 describe('Arlin backend application tests', function () {
11   before(function (done) {
12     this.server = app.listen(3333);
13     this.server.once('listening', () => done());
14   });
15
16   after(function (done) {
17     this.server.close(done);
18   });
19
20   it('starts and shows nothing at the index page', function () {
21     request('http://localhost:3333')
22       .assert.ok(body)
23       .done(err =>
24     );
25   });
26
27   describe('error 404', function () {
28     it('shows a 404', function () {
29       request({
30         url: 'http://localhost:3333/Accent'
31       })
32       .expect(404)
33       .end();
34     });
35   });
36
37   describe('global hooks', function () {
38     it('myHooks can be used', function () {
39       expect(myHooks).to.be.a('function');
40     });
41     it('addUpdatedAt can be used', function () {
42       expect(addUpdatedAt).to.be.a('function');
43     });
44   });
45
46 });
47
48 Arlin backend app running at http://127.0.0.1:3030
49
50 global hooks
51   ✓ myHooks can be used
52   ✓ addUpdatedAt can be used
53
54 Arlin backend/server application tests
55 info: (404) Route: / - Page not found
56     ✓ starts and shows nothing at the index page (41ms)
57     error 404
58 info: (404) Route: /404 - Page not found
59     ✓ shows a 404 HTML page
60
61 Arlin backend/server application tests
```

UNIT-FUNC-TEST-RE

Test Report: Backend with Mocha and Chai

All of these tests are passed. You can expect to see the actual and latest results on the CI/CD server (using Snap CI):

- <https://snap-ci.com/gunadarma-academy/asde-michi-backend>

Even more in various pipelines of development, staging, and production.

Result (26/04/2016)

```
Arlin backend app running at http://127.0.0.1:3030
global hooks
  ✓ myHooks can be used
  ✓ addUpdatedAt can be used

Arlin backend/server application tests
info: (404) Route: / - Page not found
  ✓ starts and shows nothing at the index page (41ms)
  error 404
info: (404) Route: /404 - Page not found
  ✓ shows a 404 HTML page
```

E2E Usability Test Result

| | Participant 1 | Participant 2 |
|-----------------|---------------|---------------|
| Gender | Male | Female |
| Occupation | Student | Employee |
| Background (IT) | No | Yes |
| Test Version | Desktop | Mobile |

Success Criteria

Management Side

- ✓ The planned Project Management is applied
- ✓ Full utilization of GitHub (commits, issues, milestones)
- ✓ All Statement of Work (SOW) that are on GitHub Issues connected to the Kanban board and the milestones are mapped to the Burndown chart
- ✓ Finished all required SOWs and Milestones
- ✓ Report all deliverables

Design Side

- ✓ Completed wireframes
- ✓ Completed mockups
 - 3 times of iteration
- ✓ Completed branding and logo specification
- ✓ Readable user manual document

Product and User Side

- ✓ The public app <http://arlin.link> can be accessed
- ✓ Visitor can sign up for a new user account
- ✓ User can ask a question and answer available question
- ✓ The UAT success results 74.15% (above 70%)
- ✓ Participants are able to perform given usability tasks

Technical Side

- ✓ The base full stack app is on production (Meteor & MongoDB)
- ✓ The next backend and frontend is running and automated (Feathers & Vue.js)
- ✓ The testing suites are conducted with libraries and frameworks (Mocha & Chai)
- ✓ The build and deployment are automated by a CI/CD server (Snap CI)

Notes: Iterated the app, components, and deployment more than 5 kinds of ways

A large, dense crowd of people, mostly men, is gathered in what appears to be a stadium or a large outdoor arena. Many individuals are wearing white hard hats, and some are wearing safety vests. The crowd is looking towards the right side of the frame, where a person in a white shirt and dark pants is standing prominently. The background is filled with more people, creating a sense of a large-scale event or gathering.

Critical Path

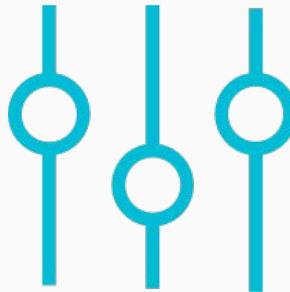
Critical Section



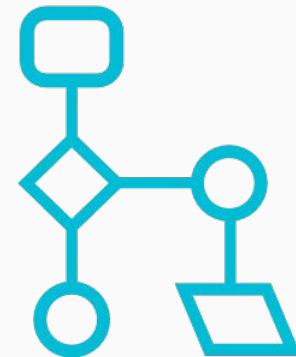
Learning



Time



Options



Process

Overall Problems

- A bit too optimistic, underestimated time and skill requirements
- Actually there're steep learning curves with too much: logic going on, things to track, new iteration overtime, and new stuffs to learn in a short amount of time
 - ◆ Also lacks of a senior/professional mentor in the fields we take on
- Jumping right into the interactive web mockup, before static/graphic mockup
- Process and technical familiarity (maybe also cultural difference)
- Understanding authentication issue with JWT and session cookies
- Communication in full stack, between backend and frontend
 - ◆ Technical choice, REST API or Socket.io
- Choosing and implementing testing suite (Mocha, Chai, Jasmine, Karma, Cucumber) and automation providers (Travis, Codeship, Snap, etc)

What's Missing?

- Need more tests that coverage all the functionalities
- User tracking, analytics, and monitoring
- New admin dashboard or management panel

Conclusion





Any Question or Feedback?



says
thank you