Nesuku Mobile Applications Design Review 1

TEAM 15

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Introduction

Sponsors:

◦ Logic Solutions: Logic Solutions is a full-service mobile app,web design, and eCommerce development & consulting company.

◦ Nesuku: Nesuku is a startup aiming to expand and bring access to language learning across the globe, unbounded by geography.

Background

◦ Nesuku is an online language learning marketplace for students and teachers to have effective experiences using their scheduling, payment, and online video-conferencing tool.

Design Problem

Online language learning

Difficult to organize, view, and share learning materials

An easy way to organize, create, and share files on Nesuku

Team Members

Name	Role	Background
Zhuoran Han	Liaison/Mockup Designer	ECE+NERS
Xieyang Liu	Technology Leader	ECE+CS
Siying Feng	Front End Designer	ECE+CE
Yijun Hou	Back End Designer	ECE+CE
Yanqi Wang	Front End Designer	ECE+CS

More information about the team:
https://lxieyang.github.io/nesuku-app/

Literature Search

- Which Approach/Framework to use?
  - Concerns: lack of experienced mobile developers, agile development cycle, limited resources (time, money), etc.

- What we found?
  - Source: *An Introduction to Hybrid Platform Mobile Application Development*[1]
  - Hybrid Platform for Mobile Application Development => Ionic

- What does it offer?
  - Platform Independency
  - Low Cost (development & maintenance)
  - Flexibility in the design of interface

Ref:
http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=1CCB2F54518D758F164A6134A7F7EFDC?doi=10.1.1.695.5170&rep=rep1&type=pdf

Quantification of Design Specifications

User Requirements	Engineering Specification
Operating System	Mobile OS: IOS, Android
Low Cost	Complimentary
Easily Set up	App Store/ Google Play
Instant Responses	0.01 second
Small Size	Less than 50 MB
Stable System	Optimized Code Frame: Ionic
Maintenance	Bi-Weekly Updating
Large Storage	400 MB

QFD

Nesuku Mobile App

Correlation:
Positive **+**
Negative: **-**

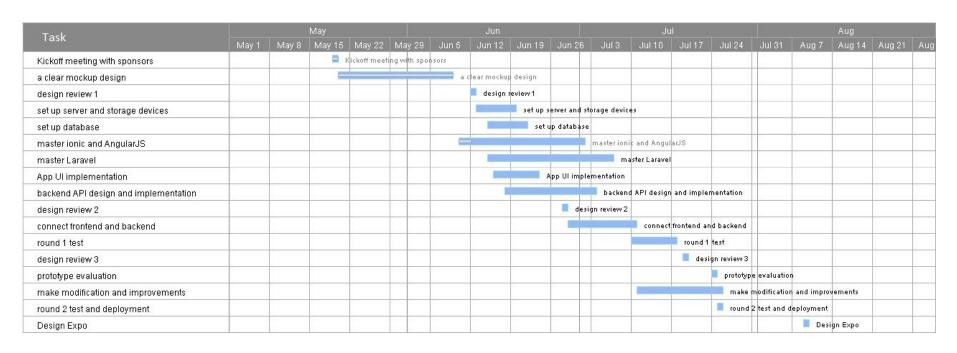| Customer Requirements	Importance	Extendibility of Modules (+)	Universal Compatibility of OS(+)	Memory Consumption (-)	Stability of System (+)	Delay Time of Server (-)	# of Filters (-)	Maintenance Frequency (-)	Reliability of API (+)	Searching Time (-)	Searching Accuray (+)	Server Storage (+)	Nesuku	Italki	Verbling
Ability to Manage Files	10		1		3	3	3		3	3	9	9	5	-	-
Reliable System	8			3	9			9	9				4	4	3
User-Friendly Interface	9					9	9			9	9		5	4	5
Low Cost	4	9		9				3		1		9	5	4	4
Low Hardware Requirements	7		3	9					1				5	5	4
Usability on Different OS	7		9	3	3				3				5	5	5
High Consistency after Updates	5	9						3				1	3	4	4
Instant Response	6				3	9	3		3	9	3	3	4	5	3
Technical Importance: Absolute		81	102	144	141	173	129	99	148	169	189	149			
Technical Importance: Normalized		0.0531	0.0669	0.0945	0.0925										
Importance Rating															
Measurement Unit		-	-	MB	-	s	#	week	-	s	%	TB			
Nesuku		High	IOS/Android	50	High	0.5	3	2	High	0.01	99	10			
Italki		High	IOS/Android	37	Medium	0.1	2	4	High	0.02	95	N/A			
Verbling		High	IOS/Android	46	High	0.2	3	8	Medium	0.02	95	N/A			

Benchmarking

Benchmarking

- Italki
  - No file sharing functionality
- Verbling
  - File sharing is available
  - No file creation
- Wyzant
  - Built-in emailing system for attachment
  - No file creation or management

- **Nesuku**
  - Built-in file sharing system
  - Support file creation and management

Project Schedule

Task	May					Jun				Jul				Aug			
	May 1	May 8	May 15	May 22	May 29	Jun 5	Jun 12	Jun 19	Jun 26	Jul 3	Jul 10	Jul 17	Jul 24	Jul 31	Aug 7	Aug 14	Aug 21	Aug
Kickoff meeting with sponsors			Kickoff meeting with sponsors														
a clear mockup design			a clear mockup design														
design review 1						design review 1											
set up server and storage devices						set up server and storage devices											
set up database						set up database											
master ionic and AngularJS					master ionic and AngularJS												
master Laravel						master Laravel											
App UI implementation						App UI implementation											
backend API design and implementation						backend API design and implementation											
design review 2							design review 2										
connect frontend and backend								connect frontend and backend								
round 1 test									round 1 test							
design review 3										design review 3						
prototype evaluation										prototype evaluation						
make modification and improvements										make modification and improvements						
round 2 test and deployment										round 2 test and deployment						
Design Expo														Design Expo		

Q & A