

KCShare

Visible Learning

Kingsway College Senior School

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Problem: A majority of a student's learning is invisible to their peers

Kingsway College Senior School

Problem: Most of the work a student does is hidden from their peers

Concept: Each student takes a unique path in their learning experience,
this is something worth **sharing**

Guiding Design Principles

Guiding Design Principles

1. Easy to share
2. Easy to explore
3. Easy to moderate
4. Minimal
5. Sparks Discussion
6. Inclusive Environment

WEB DEMO

KCShare ADMIN

Home

Favourites

My Posts

Search User

Explore

Sign Out



March 30, 2020

Uploaded by: marco@student.kcs.ca



 Minecraft



Having so much fun playing Minecraft during school. [#boring](#) [#lecture](#). Join my Minecraft server at mc.cssu.ca
[#gamer](#) [#skool](#)



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MOBILE DEMO



KINGSWAY
COLLEGE SCHOOL

shardul

shardul

SIGN IN



Accessing the Backend

- Backend is hosted by Amazon Web Service
- Log in with developer credentials to access
- Services Used:
 - DynamoDB
 - Cloudfront
 - AWS Lambda
 - API Gateway
 - Amazon S3
 - Cognito

Accessing the Mobile Application

- Mobile Application is a Cross Platform App written in React Native
- Source code is available in the project GitHub repository
- App can be compiled and used using Expo Client on Android or iOS, with the instructions given in the mobile README file
- Towards the end, the app will be sent for review and published in the Android and iOS app stores.

Accessing the Website

- The website is hosted on AWS CloudFront with a default domain name
- A custom URL can be set using Amazon Route 53
- All source code is available in the repository
- The shortened address <https://tinyurl.com/kcs-share> can be used in the meantime

Handover Instructions

- Github repository containing mobile and web code will be handed over
- Documentation for mobile, web and the API is available in the GitHub repository
- AWS developer account credentials will be handed over

Technical Discussion

Lots and Lots of Lists

Primary key	Attributes				
Partition key: postID					
1	content	favouritedUsers	userID	hashtags	timeUploaded
	"post text #giraffe"	[2]	1	["#giraffe"]	123123123123123

Primary key	Attributes	
Partition key: userID		
1	posts	favourites
	[1]	[]
2	posts	favourites
	[]	[1]

Storing Relationships as Entries

Primary key		Attributes	
Partition key: primaryKey	Sort key: secondaryKey		
post-1	fav-2		
	post-1	content	timeUploaded
	tag-giraffe	"post body #giraffe"	123123123123123
	user-1		
tag-giraffe	tag-giraffe	postCount	
		1	
user-1	user-1	postCount	
		1	
user-2	user-2	postCount	
		0	

Primary key	
Partition key: secondaryKey	Sort key: primaryKey
post-1	post-1
tag-giraffe	post-1
	tag-giraffe
user-1	post-1
	user-1
fav-2	post-1
user-2	user-2

The Best of Both Worlds

Primary key	
Partition key: secondaryKey	Sort key: hashtag
post-1	giraffe
giraffe	giraffe

Primary key	
Partition key: secondaryKey	Sort key: userID
post-1	1
user-1	1
fav-1	2
user-2	2

Primary key	Attributes	
Partition key: postID		
1	content	timeUploaded
	"post content #giraffe"	123123123123123

Technical Discussion

- Stateful design with React and MobX
- Being able to maintain the same state between many different views on the website and allow these views to interact with each other

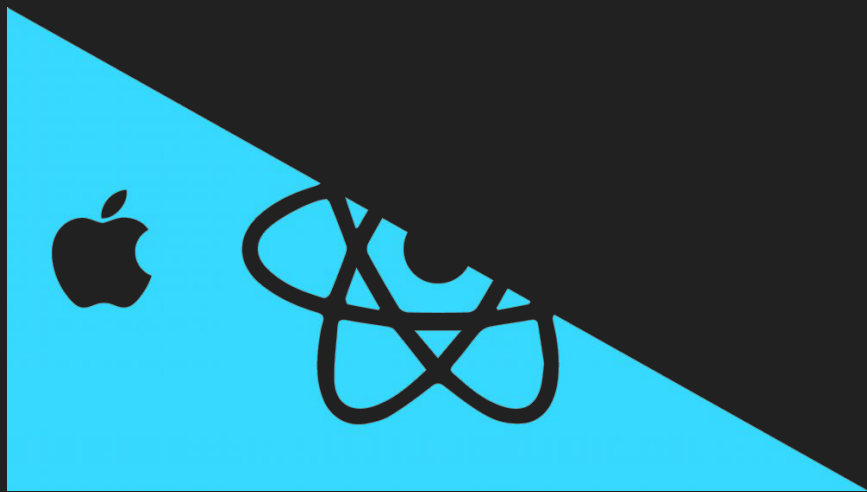
```
currentViewSwitch = (currentView, term) => {  
  switch(currentView) {  
    case 'My Posts':  
      this.setState({ tab: <PostFeed store={ this.props.store } /> });  
      return;  
    case 'Search User':  
      this.setState({ tab: <SearchUser store={ this.props.store } /> });  
      return;  
    case 'Favourites':  
      this.setState({ tab: <PostFeed store={ this.props.store } /> });  
      return;  
    case 'Explore':  
      this.setState({ tab: <Explore store={ this.props.store } /> });  
      return;  
    default:  
      this.setState({ tab: <div><CreatePost store={ this.props.store } /><PostFeed store={ this.props.store } searchTerm={ term }/></div> });  
      return;  
  }  
}
```

Technical Discussion

- Adapting to the mobile platform

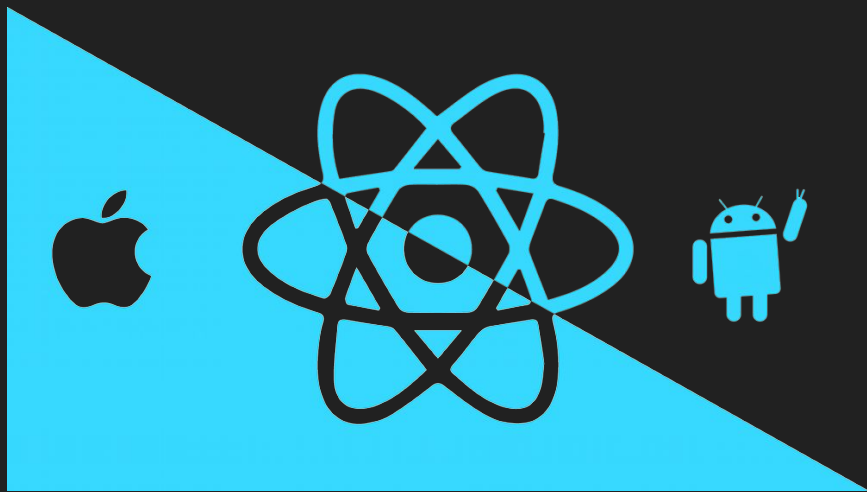
Technical Discussion

- Adapting to the mobile platform



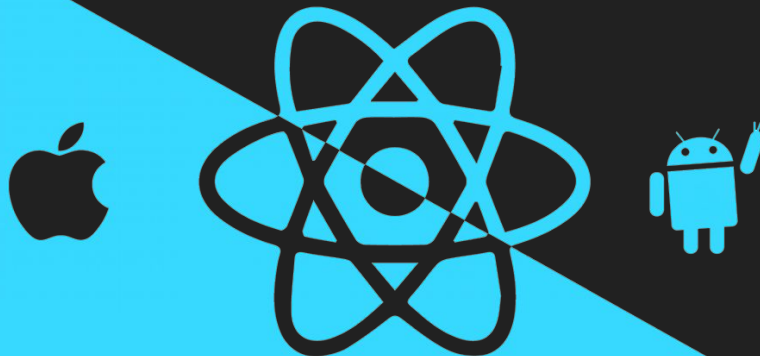
Technical Discussion

- Adapting to the mobile platform



Technical Discussion

```
searchWithTag = (tagText) => {  
  this.props.navigation.navigate("Explore", {searchParam: tagText})  
}
```



Key Learnings

Key Learnings

- The individuals

Key Learnings

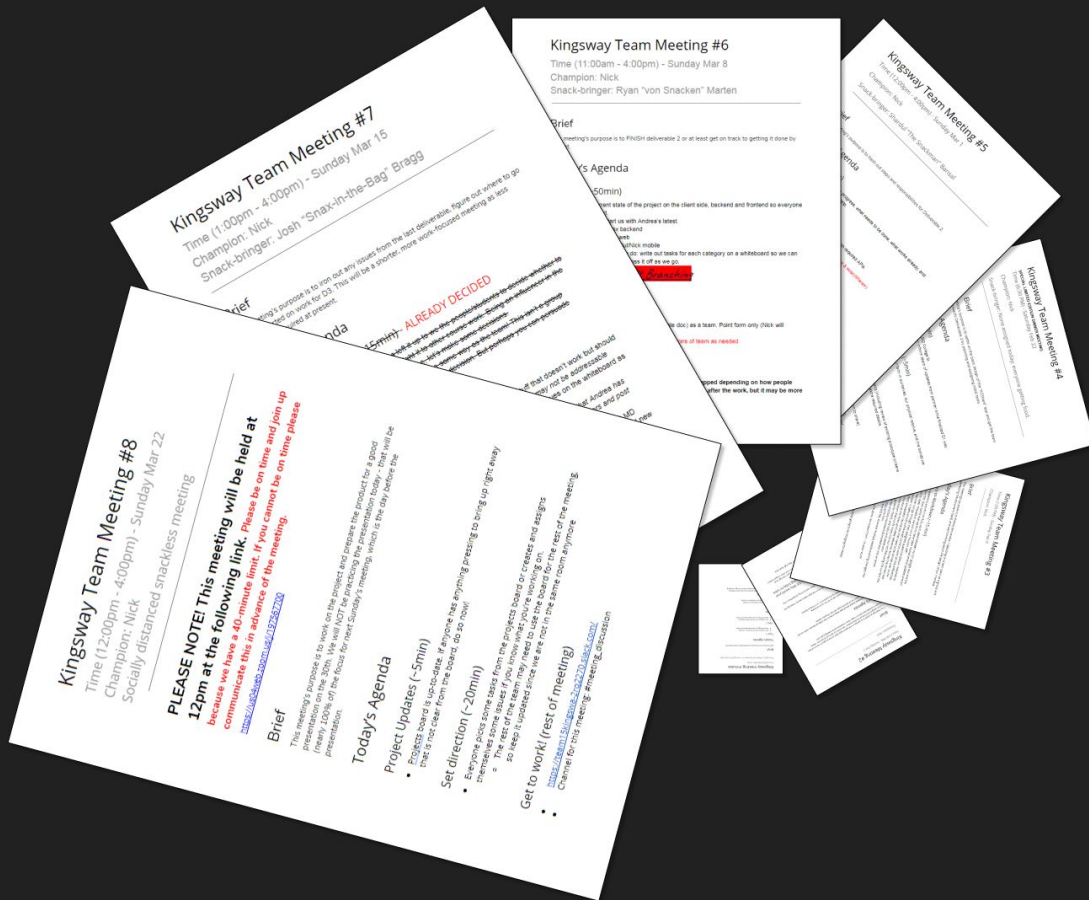
- The individuals
- Communication

Key Learnings

- The individuals
- Communication
- Meetings

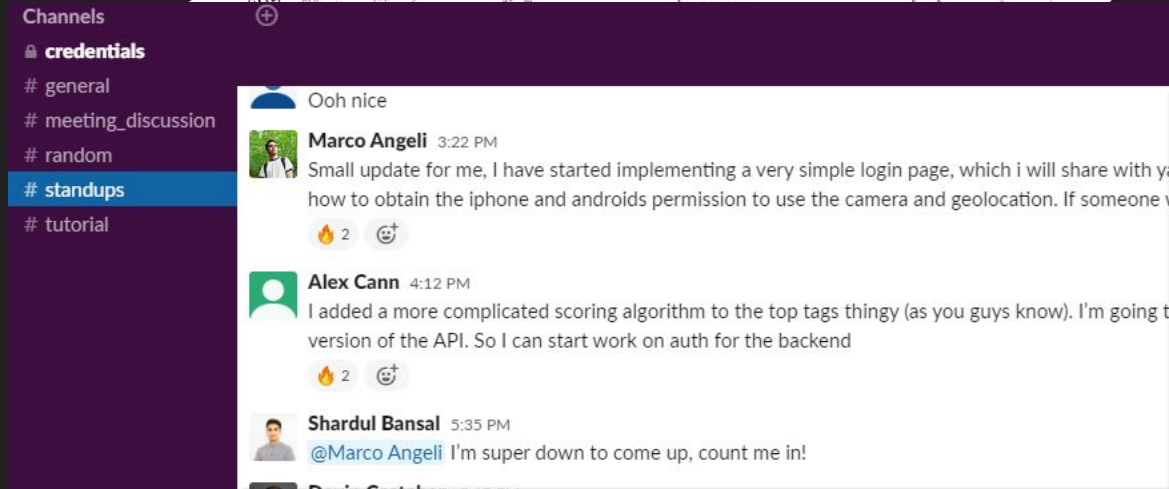
- The individuals
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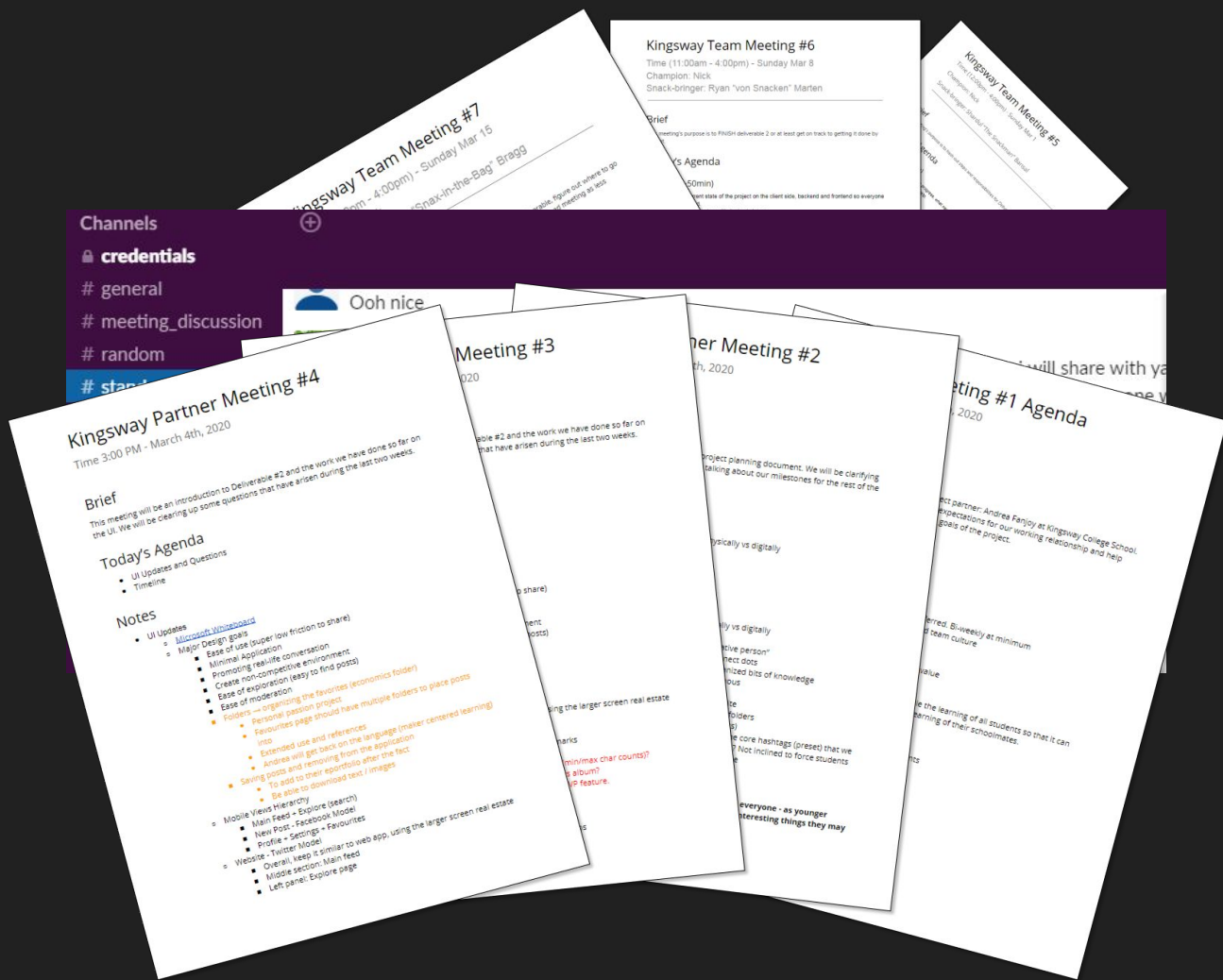
Key Learnings

- The individuals
- Communication
- Meetings



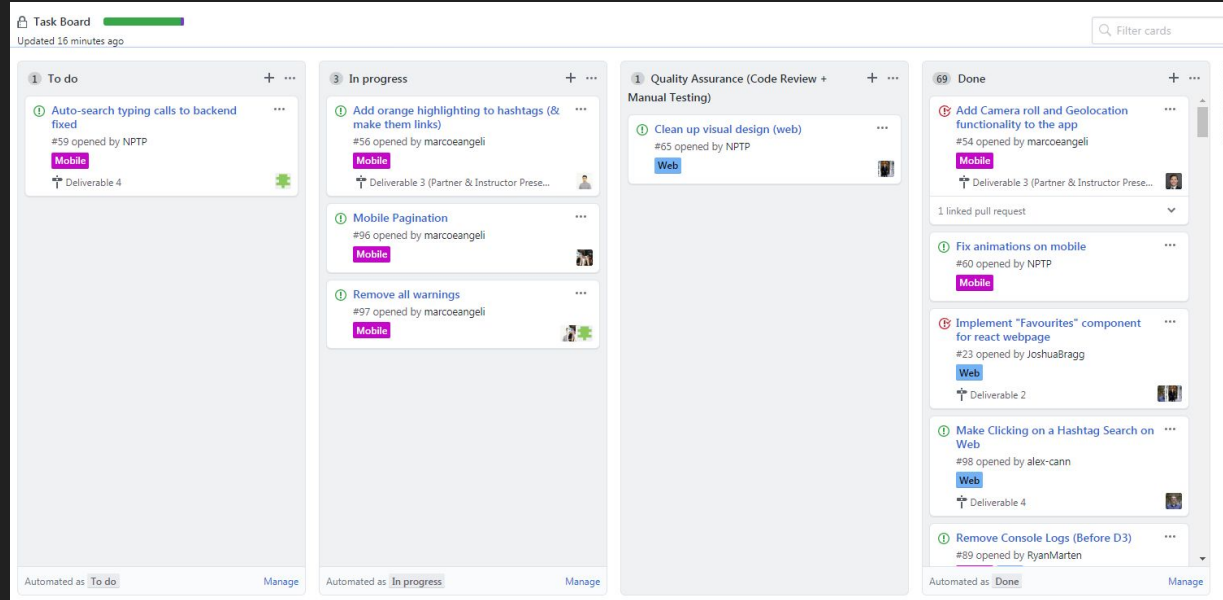
Key Learnings

- The individuals
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Key Learnings

- The individuals
- Communication
- Meetings
- Task board



Key Learnings

- The individuals
- Communication
- Meetings
- Task board
- What we learned

Key Learnings

- The individuals
- Communication
- Meetings
- Task board
- What we learned
- What we'd do differently

Individual Contributions

Team Roles:

Marco Angeli	Mobile Lead
Shardul Bansal	Feature Lead (Mobile)
Joshua Bragg	Website Lead
Alex Cann	Feature Lead (Backend)
Devin Castaban	Backend Lead
Ryan Marten	Project Manager + Web
Nick Perrin	Team Lead + Mobile

Special thanks to Andrea Fanjoy
at Kingsway College School



Q & A