

Share-IITK(Backend)

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Team Members:

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Important Links:

- Share-IITK repo

Timeline

1st week:

- Started learning scala from this book *Functional Programming in Scala*
- Jumped to this link *Twitter Scala School*, as I found it more useful.
- Came across *Neophytes Guide to Scala*, studied part - 8 from there, which was about concurrent side of scala.

2nd week:

- Learned about sbt build tool.
- Read about the features of REST API.
- Decided the endpoints for the API. There will be basically four endpoints:
 - /api/resources/search(GET): It will return the whole table(in JSON) to be searched in the frontend.
 - /api/resources/upload(POST): For uploading the respective file.
 - /api/resources/(GET): For downloading the file, distinguished by parameter MD5. Also, it will increment the score of that file by 1.

- /api/courses/(GET): Return the list of courses.
- Learned about Actors in Akka and how they are used for asynchronous calls.

3rd week:

- Followed some links to get an idea of akka http REST API, for example:
 - Reactive REST Services using Akka HTTP
 - Building a REST Service in Scala with Akka HTTP, Akka Streams and Reactive Mongo - DZone Java
 - How to build a REST API with Akka Http
- Wrote the code for handling HttpResponses using akka for Share IITK repo.
- Started learning Slick, for handling database in scala.

4rd week:

- Read initial chapters from the book Essential Slick.
- Tried understanding code sample from Essential-Slick-Code
- Understood concept of DSL Routing partially and how it is used to respond to incoming HTTP requests. Implemented DSL routing instead of Function level interface for handling HTTP requests.
- Started writing code for uploading file using multi-part upload(as I found it more preferable after searching for hours on google).