Hosted by 7PEAKS

SCALA WORKSHOP#2

PRACTICAL CODING APPLICATION

MAY 2, 2019 18.30 - 21.00

7 Peaks Software Dhammalert Building , 2nd Floor

Giorgio Desideri
Cloud Software Architect

HOUR 1

PEAKS

- Refreshing concepts to code the application
- Domain analysis and design
- Functional and object design
- Coding application

REFRESH

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- Define application domain (entity, DTO, DAO, etc …)
- All types are objects
- “Functional programming is …. as the evaluation of mathematical functions and avoids state and mutable data”
- DSL := (function + stateless + immutable types)

Monoids

PEAKS

- Exist class A
- SomeFunction(A1, A2) := A3

  (binary associative operation that takes two values of type A and combines them into one)
- SomeFunction(A1, NULL) := A1

  (A value of type A that is an identity for that operation)

Monads

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- Monads are structures that represent sequential computations. A Monad is not a class or a trait; it is a concept.
- A Monad is an object that wraps another object in Scala. Use for-comprehension instead of flatMap(s)

Options

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- `Option[A]` → is the abstract class to represents the implementations
- `Some` → options with value.

```
E.g. Option[Int] = Some(10)
```

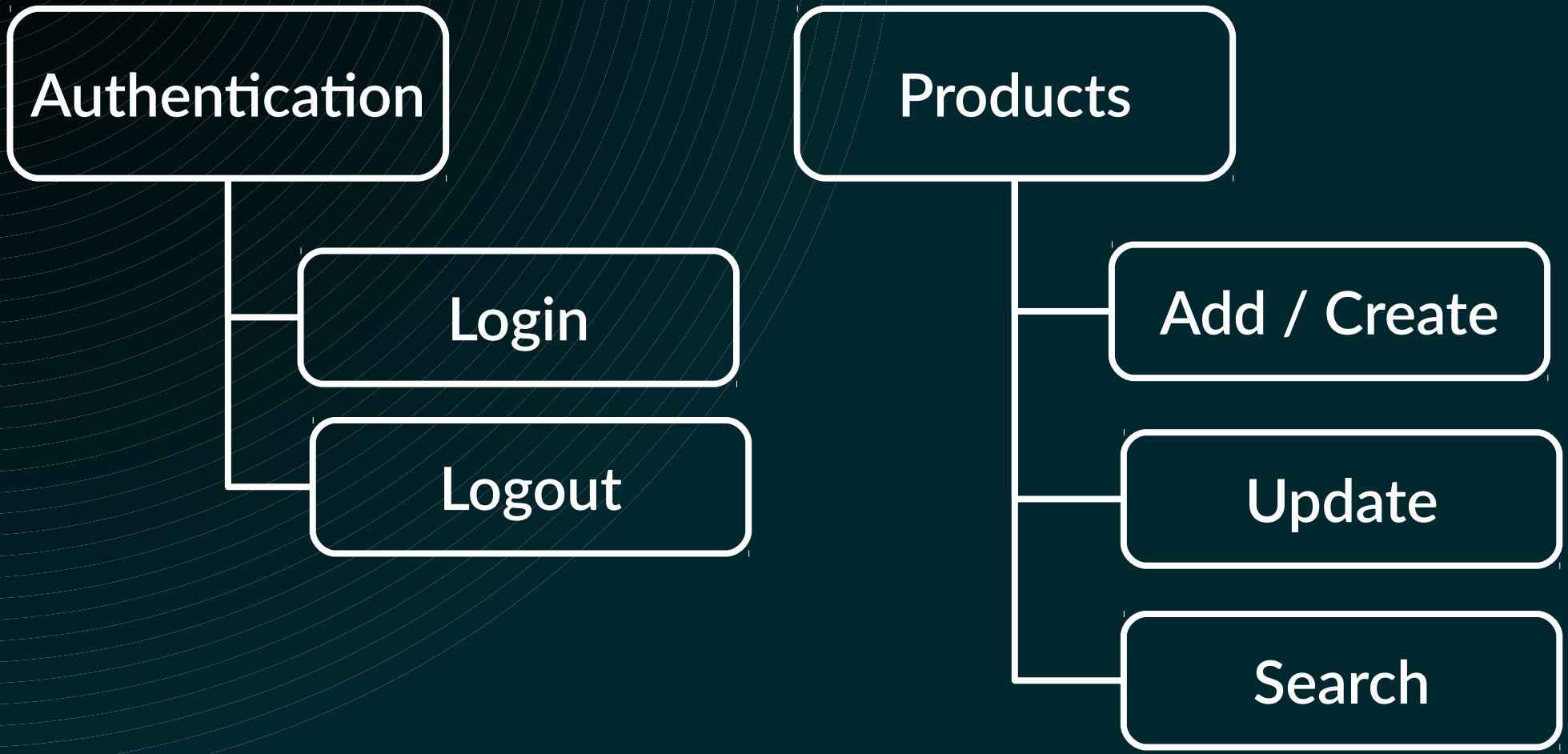
- `None` → Option without value, aka `null`

APPLICATION

PEAKS

- Test case of one E-COMMERCE application, where
  - Registered user can access by email & password
  - Registered user can create new product to sell
  - Registered user can update or remove own products
  - Unregistered user can navigate throught the website to search the products

Use Cases


Authentication
Login
Logout
Products
Add / Create
Update
Search

Use Cases

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- Authorization
  - Registered & Unregistered user
- Audit
  - Log actions on registered user to support
  - Log actions on unregistered user to statistics
- Not delete → archive for accounting

Coding

- Download application template

  https://github.com/kallsu/scala-workshop

- Choose directory

  workshop02/scala-template-app/

- Wifi SID: “7 Peaks Software”
- Password: 7p3akss0ftware

Coding

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- Domain (object and action)
- Routing
- Database
  - Entity
  - DAO
- 1st operation
  - TDD
- Validation

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End of HOUR 1

HOUR 2

PEAKS

- Finish to code the application
- “Scala”-ing the application
- Testing and improvement discussion

Coding

- Testing and acceptance criteria
  - Does it “work” ?
  - Why?
- Database ;-) ?!?!??!!??!

Discussion

- Multiple instances and multiple region distribution
  - Database changes ?
  - Logging and Audi changes ?
  - User management changes ?

End of HOUR 2

Meet our speaker

GIORGIO DESIDERI

Cloud Software Architect

Giorgio has been working in the IT industry for over 13 years. Working in positions ranging from System Engineer to Project Manager. Initially moving to Thailand to join Agoda, he has since taken a bigger role as a Cloud Software Architect at 7 Peaks Software.

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Who we are

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Links

Materials

Event Feedbacks