

Course: Introduction to Modern Application Development

Course Code: noc17-cs06

Session: 2016-17

Duration: 8 Weeks

Assessment procedures: Weekly Assignment (25%) + proctored certification Exam (75%)

Curriculum of the Course:

Week 1:

- Introduction to the course
- Introduction to a web-app
- Building a web-app
- Networks
- P1: Practical: Running your own web-server
- Protocols

Week 2

- Module P2: Practical: SSH + Network experiments
- Module P3: Practical: Building a webapp with nodejs and using git. Introduction to reverse proxies.
- Module P4: Module P4: Practical: Introduction to server-side javascript and HTML/CSS
- Module P5: Introduction to client-side Javascript
- Module P6: Practical: APIs and mobile apps use web-servers

Week 3&4:

- Module 6: Introduction to databases
- Module 7: Data modelling & constraints
- Module P7: Interacting with a DBMS
- Module P8: Practical: Deeper exploration of a DBMS (column types and more)
- Module P9: Introduction to SQL
- Module 8: Understanding database performance
- Module 9: Transactions & ACID properties
- Module 10: Database security, backup & recovery
- Module 11: Analytics & Views
- Module 12: Scaling a database
- Module P10: Module P10: Connecting your webapp to your database & SQL Injection

Week 5:

- Module 13: Authentication with HTTP

- Module 14: Understanding security, and some best practices for webapps
- Module P11: Introduction to authentication, hashing, curl & sessions

Week 6&7:

- Module 15: Introduction to mobile apps
- Module 16 - Introduction to Mobile Application Development Part 2
- Module 17 - Introduction to Android
- Module P12 - Getting started with Android Application Development
- Module P13 - Building Custom UI using XML and Logs
- Module P14 - Building a Blog App
- Module 18: Deploying an app to the Google Play Store
- Module 19: Introduction to iOS
- Version Control using Git

Week 8:

- Module 19: The API Economy
- Backend Architectures

Enrolled Students: 2

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2	Rishav Chetan
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