ICT UNIVERSITY
<HACKATHON/>

ECSA ICT UNIVERSITY
HACKATHON BRIEFING SESSION
THE TECHNICAL ASPECTS

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Topics

01 Introduction

02 Team Composition

03 System Designs & Structure

04 Software Tools

05 Website Development

06 Knowledge Management

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Introduction

The Engineering Council of South Africa (ECSA) is a statutory body established in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000).

The ECSA ICT University Hackathon is the first of planned hackathons where participants are expected to create a website and Knowledge Management solution addressing an assigned theme.

ECSA wants to ensure that it has all the required and feasible digital platforms that enable anywhere and anytime access to information and its services by all its stakeholders.

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Team Members & Task Dissemination

Administrator	(1 member)
Researcher	(2 members)
Presenter	(1 members)
System Designer	(2 members)
Front & Back-end Developer	(4 member)

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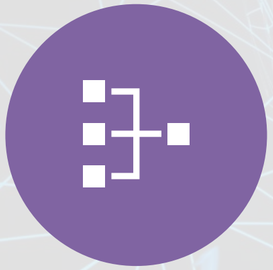
System Design

Systems design as the process that defines elements of a system like modules, architecture, components and their interfaces and data for a system based on specified requirements

LOGICAL DESIGN

SYSTEM ARCHITECTURE



ENTITY RELATIONSHIP MODEL/DIAGRAM

CONCEPTUAL DATA MODELING

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Tools & Platforms Used

Bootstrap

Visual Studio Code

Programming Languages Used

HTML5 | CSS3 | PHP | C# | JavaScript | Python | XML | SQL | JSON | Angular

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Website

ECSA website should be cutting-edge and must resemble the organisations corporate Identity

- Programming Languages
- Design Layout
- Use Cases
- Search Engine Optimization

- Web Hosting
- Security (SSL – Security Socket Layer Certificates)
- Analytics
- Website Maintenance

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Knowledge Management

Knowledge Management (KM) system is a system that can make use of tools such as the Microsoft SharePoint libraries

- Store and share files (internal documents, images, and videos related to organisational activities)
- Share organisational updates.
- Share relevant published material.
- Connect employees.
- Collaborate with external stakeholders.
- Increase productivity by accessing organisational knowledge (stored by different divisions) in one integrated system.

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Thank You

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