

# Presentation 2

## Overview of Presentation

**Title page** (take over from Pres1)

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**Introduction** (take over from Pres1)

## Requirements Analysis

- functional and non-functional requirements (take over from Pres1)
- data requirements
- Regulatory and Compliance Requirements
- related work
  - there are generative storybooks
  - we have an end

## High-Level Design

- Architecture Overview
- Python Program
  - Book layout design prototype
  - (Page transitions) → Pres 3 ?
  - (Reader interaction) → Pres 3 ?
- AI Code Generation
  - (Integration with Python program) → Pres 3 ?
- AI Multimedia Content
  - Image, sounds generation prototype
    - sound for page transitions
    - background music (intense, balbla)
    - qr codes for more knowledge und so hintergrundwissen und so
  - (Integration with the book) → Pres 3 ?
- AI Story Generation
  - Story decision Tree
  - Core narrative creation
  - (Integration with user choices) → Pres 3 ?

**Final Product** (take over from Pres1)

## Future Development

- what we are going to work next on
  - (Page transitions) → Pres 3
  - (Reader interaction) → Pres 3
  - (Integration with the book) → Pres 3
  - (Integration with user choices) → Pres 3
  - and prototype 2 for the rest

## Focus on:

### Requirement Analysis:

#### Functional Requirements:

- Specify the functionalities the interactive children's book should have. This could include features like sound effects, user choices affecting the story, QR code integration, and more.

#### Non-Functional Requirements:

- Address non-functional aspects such as performance, security, scalability, and usability. For example, the system should be user-friendly and have fast response times.

#### Data Requirements:

- Specify the data the system needs to function, such as the content of the books, multimedia elements, and user choices.

#### Regulatory and Compliance Requirements:

- If applicable, mention any legal or industry-specific regulations that need to be adhered to

### High-Level Design:

#### Architecture Overview:

- Provide an overview of the system's architecture, explaining how different components will interact to achieve the project's goals.

#### Components and Modules:

- Break down the system into its major components or modules. In your case, you'd have components for the Python program, AI code generation, multimedia generation, story generation, and documentation.

#### Data Flow:

- Show how data will flow between components and modules. For example, how AI-generated content will be integrated into the children's book.

#### Interfaces:

- Describe the interfaces or APIs between components. For instance, how the Python program will communicate with AI code generation modules.

#### Technology Stack:

- Specify the technologies and tools that will be used for each component. This could include programming languages, AI frameworks, and multimedia libraries.

#### Security Considerations:

- Highlight the security measures to be implemented, especially if the project involves data collection or user accounts.

#### Scalability and Performance:

- Discuss how the system can scale to accommodate more users or larger books while maintaining performance.

#### User Experience (UX) Design:

- Outline how the user-friendly interface and interactive elements will be designed to engage young readers effectively.

#### Development Phases:

- Provide a rough timeline or phases for the development process, including milestones for each component.

Dependencies:

- Identify any external dependencies, such as third-party libraries or data sources, that the project relies on.