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Italy – Croatia

CReAIT

# CREAIT: CO – Creation Workshop

RECIPE:

**3D Printed, Multi-Part Fortress Replica with Audio Reproducing Pen**

SITE OF IMPLEMENTATION:

**Municipality of Trogir**

**Kamerlengo Castle**

Set of instructions

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**Brief Description of the site of implementation** The implementation will take place at a historical fortress known for its architectural significance and cultural heritage. The fortress attracts numerous visitors, including those who are blind or visually impaired, who face challenges in fully experiencing the site. The 3D

et up in a dedicated, easily accessible room within the fortress, allowing for a tactile and auditory exploration of the fortress's structure

### Identified needs

There is a need to provide blind and visually impaired visitors with an engaging way to explore and understand the fortress's architecture and history. This solution aims to offer a multisensory experience that combines tactile exploration with audio descriptions, making the site more inclusive and accessible.

### Description of the Recipes

The solution involves creating a detailed, multi-part 3D printed replica of the fortress that can be assembled on a base equipped with an audio guide using a tactile audio reproducing pen (similar to the Foxy Reader). Visitors can touch and assemble the replica while listening to audio descriptions of different parts of the fortress.

### Identified Ingredients

**Language:** Clear, descriptive audio guides.

- **Multisensory:** Tactile (3D model) and auditory (audio guide) experiences.
- **Creativity:** Innovative use of 3D printing technology.
- **Mobility:** Accessible setup for visitors with different mobility needs.
- **Communication:** Effective labeling and user instructions.

### Target Groups

- Blind and visually impaired visitors.
- General visitors interested in a hands-on, interactive experience.
- Educational groups focusing on inclusive learning.
- Museum staff and volunteers assisting visitors.

### STEPS/activities for the implementation of the recipe/intervention

1. **3D Printing of Fortress Replica:**

odel of the fortress using InsideMaps or similar technology.
   - **Model Adaptation**: Prepare the model for 3D printing, ensuring it can be divided into multiple parts for assembly.
   - **Printing**: Print the model using durable materials.

   **Assembly Testing**: Test the assembly of the 3D printed parts to ensure they fit together correctly.

2. **Development of Audio Content**:
   - **Content Creation**: Develop detailed audio descriptions for each part of the fortress.
   - **Recording**: Record the audio content in high quality.
   - **Integration**: Upload the audio files to the tactile audio reproducing pen and map them to corresponding parts of the model.

3. **Construction of the Base and Setup**:
   - **Base Design**: Design and construct a sturdy base to hold the 3D model.
   - **Installation**: Install the base in an accessible area within the fortress.
   - **Labeling**: Integrate tactile labels on the base corresponding to the audio guide.

4. **Testing and Calibration**:
   - **User Testing**: Conduct testing sessions with blind and visually impaired users to gather feedback.

   **Adjustments**: Make necessary adjustments based on user feedback to improve the experience.

5. **Training**:
   - **Staff Training**: Train museum staff on how to assist visitors with the new interactive setup.

6. **Launch and Promotion**:

   **Announcement**: Announce the new feature through the fortress's communication channels.
   - **Introduction Event**: Organize an event to introduce the 3D model and audio guide to the public.

7. **Evaluation and Feedback**:
   - **Feedback Collection**: Gather visitor feedback to assess the effectiveness of the experience.

   **Continuous Improvement**: Make ongoing improvements based on feedback.

n of the recipe/intervention

- Project Manager: Oversees the entire implementation process.
- 3D Printing Team: Manages the preparation, printing, and assembly of the model.
- Audio Content Creators: Develop and record the audio descriptions.
- Installation Team: Constructs the base and sets up the model.
- Museum Staff and Volunteers: Assist with training and support for visitors.
- Marketing Team: Promote the new feature and organize the launch event.

## TIMING for the the implementation of the recipe/intervention

- Week 1: Planning and procurement of materials.
- Week 2: 3D model preparation and printing.
- Week 3: Audio content development and recording.
- Week 4: Construction of the base and setup.
- Week 5: Testing, calibration, and adjustments.
- Week 6: Staff training and launch event.
- Week 7: Evaluation and feedback collection.

## BUDGET for the the implementation of the recipe/intervention

- 3D Printing:
  - Material Costs and Printing: eur 800
- Base Construction:
  - Materials and Assembly: eur 300
- Audio Content Production:
  - Recording and Editing: eur 200

oxy Reader or similar): eur 300

- Integration of Labels and Audio Content: eur 150
- Installation and Setup: eur 250
- Miscellaneous Costs: eur 50

- Contingency (10% of total): eur 200

**Total Estimated Cost: eur 2250**