

# Chapter 1

## Usecases

### 1.1 Import picture

**Goal** The goal is to import a picture into the selected frame (or frames).

**Precondition** If the user wants to import a picture from camera: The camera is set up for use in the application.

**Postcondition** The picture is added to the selected frame/frames.

**Description** A new frame is created *using* “*Create frame*” and a picture is imported into this frame, either from the storage medium, or from a camera.

#### Unresolved issues

- What if the user wants to import a picture into an existing frame?
- What about layers?

#### Technical implication

- Need library support for handling/interpreting picture formats and for recording them from the camera.

#### Main success scenario

1. The user request to add a picture to the animation
2. The system creates a new frame after the currently selected *using* the “*Create frame*” usecase
3. The system adds the picture to the new frame

**Variations**

- 1a. The user request to add a picture from a file on the harddrive
    1. The system ask where the picture file is located on the hard drive
    2. The user tells the system where the picture file is located on the harddrive
  - 2a. The the picture file is not an supported file type
    - (a) The system informs the user that the file is not supported
    - (b) The system ask the user where another picture file is located on the harddrive.
  - 1b. The user request to add a picture from a camera connected to the computer
    1. The system takes a snapshot from the camera
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## 1.2 Create frame

**Goal** The goal is to create a new frame.

**Precondition**

**Postcondition** The new frame is created, added to the animation and selected.

**Description** The user specifies that he wants to add another frame to the animation, and the systems creates it and adds it to the animation.

**Unresolved issues**

- What if there are no opened projects? Create one?

**Technical implication**

**Main success scenarios**

1. The user requests to create a new frame
  2. The system creates a new frame behind the one currently selected
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### 1.3 Add subtext

**Goal** The goal is to add a subtext to a frame or a (continuous?) series of frames.

**Precondition**

**Postcondition** Subtext is added to the selected frames.

**Description** The user selects one or more frames and then specifies a subtext for them.

**Unresolved issues**

**Technical implication**

- Might want library support for raster or vector text. I think gstreamer has a plugin (demuxer) for this...
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### 1.4 Create movie

**Goal** The goal is to export the animation to a movie format such as vcd or mpeg.

**Precondition** There is an animation to export as a movie

**Postcondition** The movie file with the animation is created.

**Description** The program builds the movie file from the different pictures, sounds, subtexts, etc in the animation project, and stores it to a storage medium.

**Unresolved issues**

**Technical implication**

- Need library support for exporting to the different formats.
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### 1.5 Import sound

**Goal** The goal is to import a sound effects into the project from the selected scene and onward until the sound is played to completion.

**Precondition** The frame to link the sound to is selected.

**Postcondition** The sound is linked to the selected frame.

**Description** A sound is either imported from a sound file or recorded from a microphone. The sound is then added to a frame and starts playing when the movie reaches the frame.

#### **Unresolved issues**

- Different formats (MP3, WAV, etc)
- Special considerations for the background music or should this just be inserted as a long sound started from the first frame?

#### **Technical implication**

- Need libraries for interpreting the sound files, playing them, putting them into the video and for recording sound from the microphone.

#### **Main success scenarios**

1. The user request to add a sound to the selected frame
2. The system links the sound to the selected frame

#### **Variations**

**1a.** The user request to add a sound from a file on the storage medium

1. The system ask where the sound file is located on the storage medium
2. The user tells the system where the picture file is located on the storage medium

**2a.** The sound file is not an supported file type

- (a) The system informs the user that the file is not supported
- (b) The system ask the user where another sound file is located on the storage medium

**1b.** The user request to add a sound captured from a microphone connected to the computer

1. <The way this should be resolved has to be determined. Either use some other program, not allow it or build in some mechanism for capturing sound>
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## 1.6 Run animation

**Goal** The goal is to show the animation with sound and other attributes to the user.

**Precondition**

**Postcondition**

**Description** Runs the animation by displaying one frame at a time together with sound and other attributes.

**Unresolved issues**

- How should the different component such as picture(s), sound file, etc be added together? On the fly or before the animation is run?

**Technical implication**

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## 1.7 Run scene

**Goal** The goal is to show the selected scene as an continuous animation with sound and other attributes to the user .

**Precondition**

**Postcondition**

**Description** Runs the scene as an animation by displaying the frames one at a time together with sound and other attributes.

**Unresolved issues**

- How should the different component such as picture(s), sound file, etc be added together? On the fly or before the animation is run?
- What about sounds which transcends scenes.

**Technical implication**

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## 1.8 Copy frame

**Goal** To copy a frame with all it's preferences.

**Precondition** A frame is selected.

**Postcondition** A new frame, identical, frame is created and put after the old frame.

**Description** The selected frame is copied and the copy is placed in the next frame slot. The old frame remains selected.

**Unresolved issues**

**Technical implication**

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## 1.9 Setup camera

**Goal** To set up a camera to use for capturing pictures.

**Precondition**

**Postcondition** The camera is set up successfully and ready for use for image capturing and onionscinning.

**Description** The user adds the camera to the program and sets it up for use by the application.

**Unresolved issues**

**Technical implication**

- Library support for talking to different camera and webcam standards.