Protagonist

The Other Way Works
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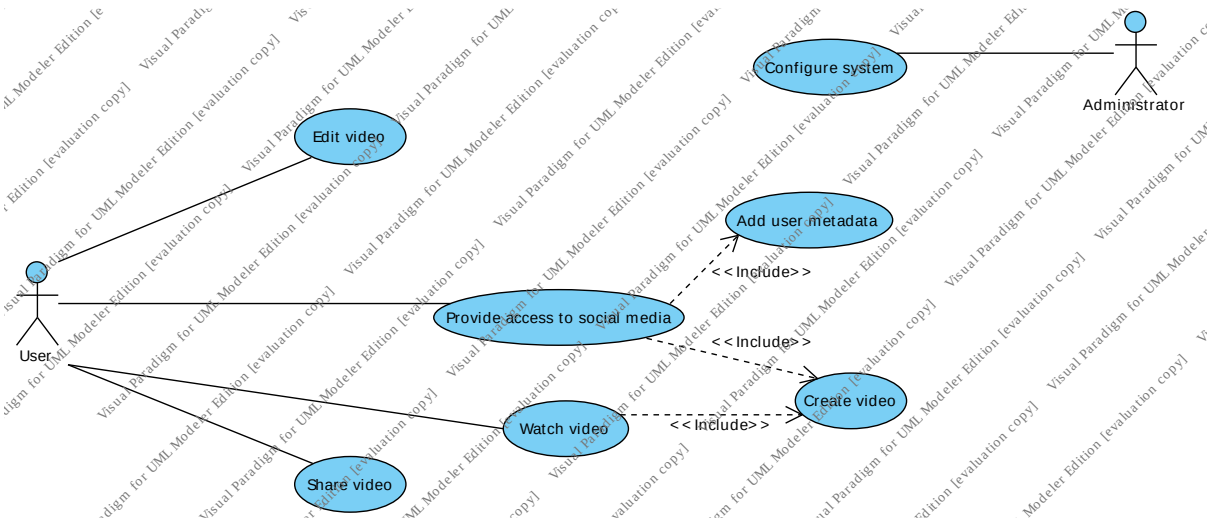
Use Case Diagram

Use Case



Name	Value
Name	Use Case

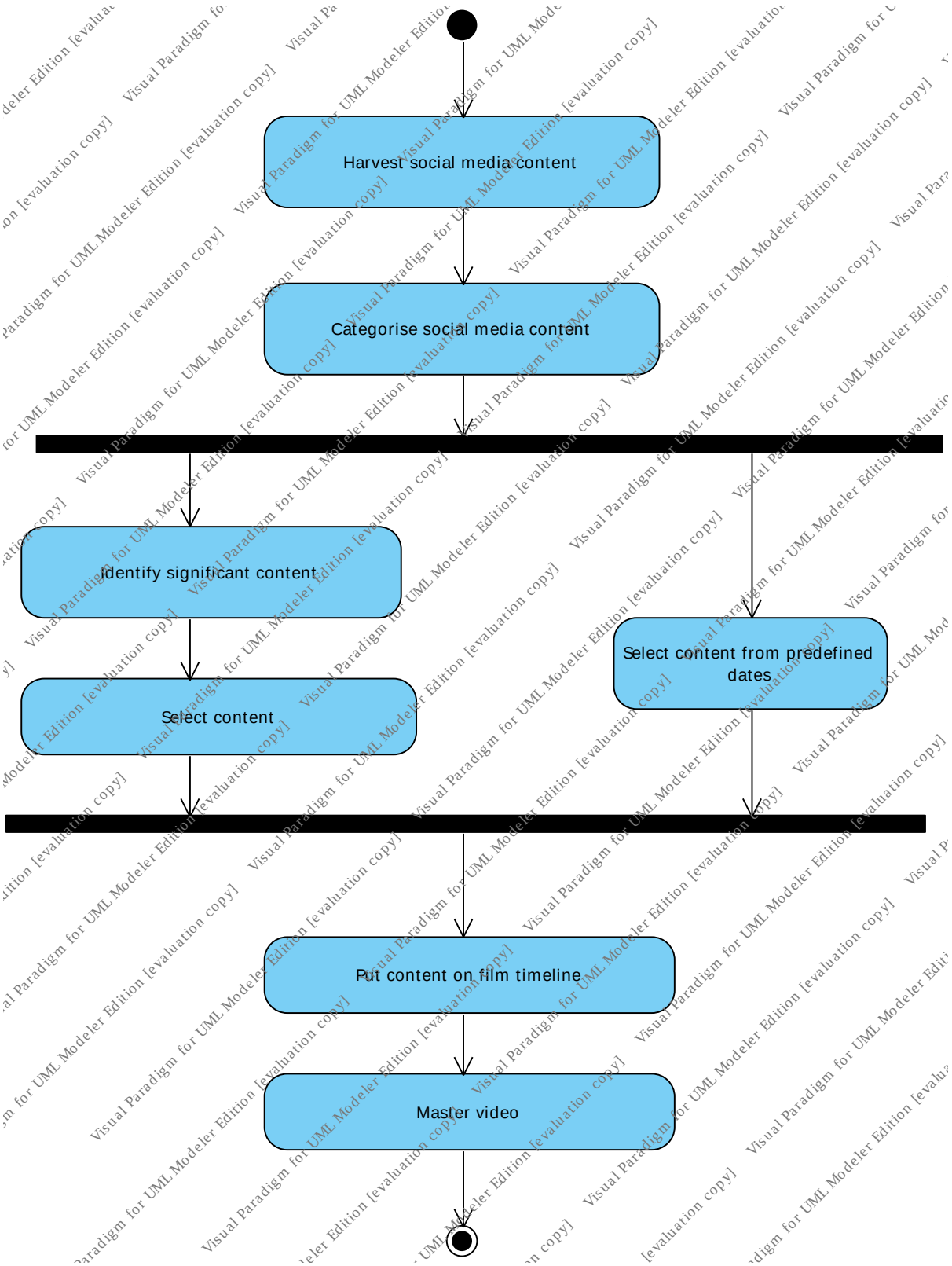
Summary

Name	Documentation
User	The user is the person who has requested a video memoir to be made about their life.
Administrator	The person responsible for configuring the rules of the system.
Create video	Algorithmically produce a video memoir from social media content. The aim is to produce the video with no human intervention. If there are very quick tasks which could be done by a human which could make a huge improvement to the output these could be suggested for discussion.
Add user metadata	The user will provide basic information during sign-up to help the algorithm to identify content of significance. eg: • date of birth; • relationship status; • name of partner if any.
Share video	Send sharing link to email, or all signed-up social networks. Possibly provide a download option.
Watch video	Watch the video online.

Provide access to social media	This use case includes sign-up for the service. The permissions for each social network will need to be provided by the user.
Edit video	Give limited editing options to allow the video to be edited. Not part of the initial project scope. The aim of the project is that the algorithm is sufficient to produce the video without reliance of human-assisted editing.
Configure system	Configure themes, etc.

Activity Diagram

Create Video



Name	Value
Name	Create Video

Summary

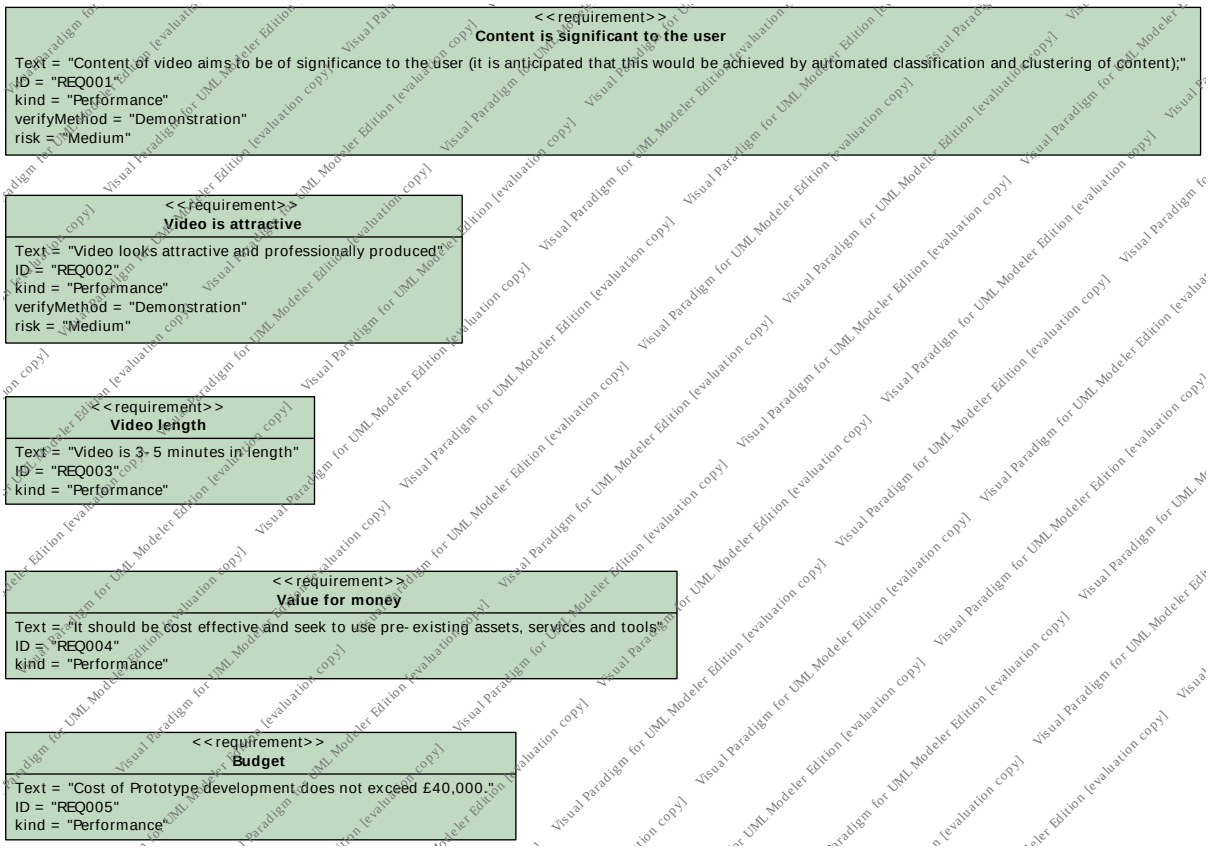
Name	Documentation
Harvest social media content	All Content posted by the User from a number of social media platforms (SocialNetwork) will be downloaded into a database, including Text, Image and VideoClip, with any available metadata.
Categorise social media content	This action is to try to understand the content. As a result of this action the content in the database should be tagged, categorised, and scored against various criteria. We want to be able to understand what content is associated with key events as below: Life events • Birth • Baptism • First day at school • Religious Coming of Age Ceremony • Graduation • Marriage • Birth of children • Significant birthday • Wedding Anniversary • Funeral Family Events • Big number birthday parties of family members • Big number Wedding Anniversaries of family members • Holidays Achievements: Sporting achievements • Triathalon • Marathon / Half Marathon • Climbing Mountain: Everest(!) / Kilimanjaro / Ben Nevis / 3 Peaks Challenge Achievements: Passing Tests • Driving Test • Music / Dance Grade exams • Academic Exams Friends • Birthday Parties • Nights Out • Day Trips • Holidays • Cultural Events • Music Festivals • Other Festivals • Marches & Protests Work

	• Starting new job • Promotion • Presenting at Conference / Product Launch / Performance (or similar) It will help to know who is involved in the event being posted, eg. family members, partner, etc. There is existing literature on the web on how to solve the problem of understanding unstructured social media data. One approach (possibly not relevant to this project) is: http://link.springer.com/chapter/10.1007%2F978-3-642-21064-8_27#page-1
Identify significant content	This action rates each item of content for significance to the user. The following may be considered by the algorithm: • Significance of people tagged (eg. with partner) • Key event mentioned in text or title (see list in previous action) • Level of engagement (likes, comments, favourites, retweets...) • Correlation with datestamp of key event (eg. Facebook identifies date of wedding, so increase scores of content from other services posted on that dat This is expected to be the most complex part of the project.
Select content	From the identified content of significance to the user, Content associated with a fixed number of 'events' will be selected. We would like to select 10-12 Events, with each of the following Theme represented with at least one Event from each: • Life events • Family Events • Achievements: Sporting achievements • Achievements: Passing Tests • Friends • Work
Select content from predefined dates	The system will be configured by the administrator to select three dates. Note, these each have national and international significance (eg. birth of the Royal baby, election of Barack Obama).

	All content from all networks timestamped with these dates will be selected for inclusion in the video. Each date will be treated as an event.
Put content on film timeline	Apply sequence, timing and transitions to the selected content to make a film between 1-3 minutes. The length of the video will require user research, and may depend on how much content is available. This includes the start/stop times of any selected videos. For the feasibility project, we have commissioned an animator to produce a "design fiction" film. She will produce a number of re-usable animated effects as part of this process. It is anticipated that a template will be used to produce the film, but that that the template will be adaptable to the content. For example, the template will have different treatments for image albums, single images and videos. It will have a set of pre-defined editing assets such as transitions, typefaces, effects and layouts, and apply these intelligently depending on the selected categories of content. The content will be ordered by theme with each theme potentially containing multiple events.
Master video	Create the atmosphere of the film. This includes: • Add soundtrack - This could be inspired by the user's listening preferences from services such as bandcamp, last.fm or spotify. • Apply a grading effect. Render the video in a file format suitable for streaming and online sharing, eg. h.265

Requirement Diagram

TopLevelRequirements



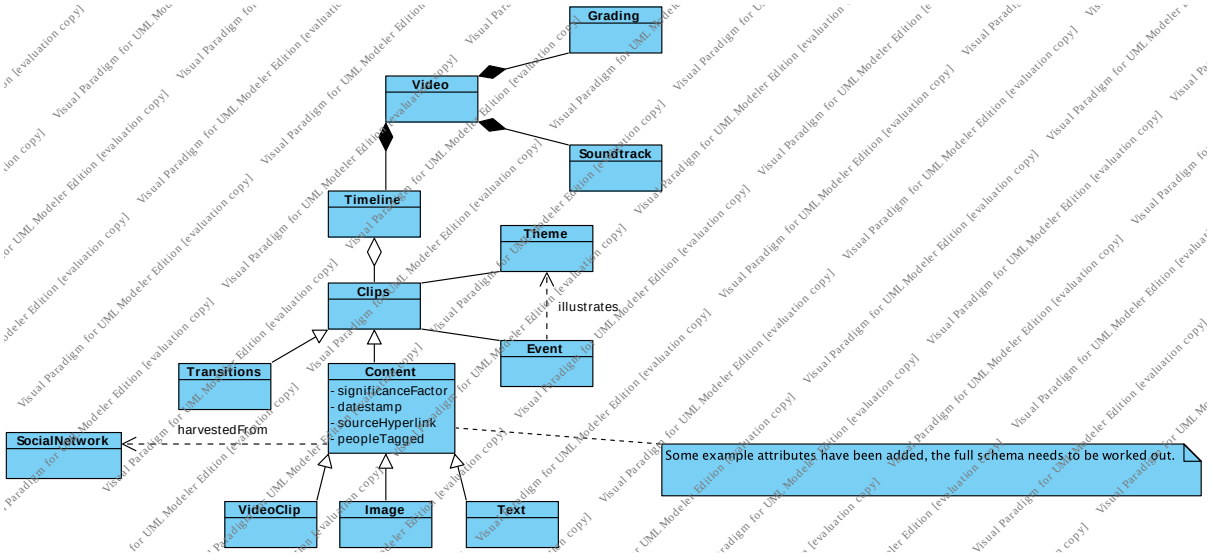
Name	Value
Name	TopLevelRequirements

Summary

Name	Documentation
Content is significant to the user	Content of video aims to be of significance to the user (it is anticipated that this would be achieved by automated classification and clustering of content);
Video is attractive	Video looks attractive and professionally produced
Video length	Video is 3-5 minutes in length
Value for money	It should be cost effective and seek to use pre-existing assets, services and tools
Budget	Cost of Prototype development does not exceed £40,000.

Class Diagram

Terminology



Name	Value
Name	Terminology

Summary

Name	Documentation
Grading	This is the effect applied to the video during mastering.
Video	This is the output video ready for sharing or viewing.
Soundtrack	This is a piece of music which lasts for the duration of the video. It may be one of a selection of audio files, or may be selected from a library based on the user's listening or purchasing profiles identified during data harvesting. There are currently licensing problems with this so this.
Timeline	This is a linear presentation of the selected content.
Theme	The theme is one of the following: • Life events • Family Events • Achievements: Sporting or other achievements • Friends • Work
Clips	These are the items on the timeline.
Event	The event illustrates the theme. It may be for example a birthday party or wedding day.
Transitions	The transitions are pre-made animations commissioned as part of this project. The transition may include heading text, eg. the name of the event.

Content	An item of social media content along with associated metadata either from the social network or added by the algorithm.
SocialNetwork	The social network which is the source of the Content. Key services should include: • Facebook • Twitter • Instagram • Youtube • Flickr • Google+ Secondary services could include: • Vimeo • Vine • Foursquare • Wordpress • Last.fm • Bandcamp • Spotify
VideoClip	This is the video downloaded from the social network. The algorithm may try to find the best part of the clip and crop it.
Image	The image downloaded from the social network.
Text	Text harvested from social network, eg. Twitter tweets, Facebook comments, etc.
N/A	Some example attributes have been added, the full schema needs to be worked out.