

Travollio (Travel Journal) Proposal

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1.0 Introduction Overview

1.1 Problem Statement

Ms. Elaine Weltz from Wanderer's Tools has approached Hyperion-Gold to assist in the design and build of a new software for their company. This system will be an application to assist travelers in the creation of a concise and accurate journal of their travels. Travollio (as the application will be referred to for the remainder of this document) must be simple so users of all technical skill levels can benefit from it. Travollio is meant as a good easy to use application to pull all the information about a traveler's trip together as they travel. Overall Travollio should be the easiest solution for a traveler to create a presentable and complete journal of their journeys.



1.2 Project Vision & Scope

Travollio is really meant to fill the gap of easy to use travel journal creation tools. Travollio must draw together all sorts of travel media, locations, receipts, photos, videos, notes, etc. Travollio must also present all of its collected information in a way that is easy to understand to look back upon and share with friends and family. Beyond just family and friends collected information should also be analyzed for information useful to both Wanderer's Tools and outside Travel companies.

Travollio must be created for all platforms to make Travollio as available to travelers as possible. Travollio must also be created with the user in mind, it will be intuitive to people who have a standard knowledge of computer programs. Most importantly Travollio should be a more useful way for travelers to cement their experiences traveling.

1.3 Requirements Summary

In order to properly deliver the system that has been requested by Wanderer's Tools, Travollio should satisfy a key set of requirements as stated in the system request form. These requirements are as stated:

- ❖ Support both the Windows and Mac platforms
- ❖ Bring together several forms of media, pictures, videos, logs, etc.
- ❖ Be an intuitive application for moderately tech savvy people
- ❖ Usable without a constant internet connection
- ❖ Create or be useful for the creation of a travel journal with collected information
- ❖ Be quick to use, plan for many small entry sessions throughout a trip
- ❖ Avoid being a tool for travel spam
- ❖ Allow for the removal of data deemed unnecessary for the journal by the traveler
- ❖ Overall provide an easy and approachable solution for travel journaling



1.4 Stakeholders & Interests

- ❖ **Travelers**
 - Travelers want a simple to use tool for compiling relevant information about their travels to look back on.
- ❖ **Travel Agents**
 - Travel Agents can understand where people are travelling most so that they can offer more relevant travel plans for current travelers.
- ❖ **Trip Planners**
 - Planning Travelers can see what other attractions certain destinations have in order to make an informed decision for where they want to go based on shared travel journals.
- ❖ **Tourism/Travel agencies**
 - Companies that wish to offer travel experiences can ascertain what people like to do in specific locations as well as popular destinations to better focus their services.
- ❖ **Wanderer's Tools**
 - Wanderer's Tools will gain their first product to offer consumers to make a name for themselves in the travel industry as well as provide a desired product to their customers.
- ❖ **Hyperion-Gold**
 - We will be able to show our expertise in software development as well as our flexibility with types of projects we can undertake to new potential partners.

1.5 Expected Costs & Benefits

Benefits:

- Travelers will gain an easy and intuitive method for putting together a travel journal that they can use to better recall their journeys
- Tourism and Travel companies can get more specific information about what people do on their trips
- Travelers will have a better method of storing their pictures instead of in mass unmarked quantities
- Travelers can create their journals on the go saving them the task of pulling all their trip data together once they arrive home
- Travelers will have one place to put all their trip data than in scattered and unlinked text and media files
- Wanderer's Tools will have their first product to put them on the map and build a relationship with their customer base

Costs:

- Capital needed to fund the creation of the product, although raising and supporting this project will be Wanderer's Tools responsibility
- Hardware necessary to support the engineering of the Travollio application as well as to aid in testing it out once prototypes have been made
- Additional Staff for Hyperion-Gold in order to have the full manpower necessary to complete the application in a timely manner while maintaining a quality product
- Licensing for supporting software, currently this should only be software that is used to create the application
- Funding for a webpage to sell and distribute the software upon completion unless a better alternative is found
- Time spent by Hyperion-Gold employees who will be working solely on this product until its completion

1.6 Constraints

Travollio can be a very useful tool for travel companies to focus their marketing and plan offerings. However, we do not want to betray the trust of the users, therefore it is necessary to refrain from allowing data shared by Travollio to directly lead to an overflow of travel spam.

- To do this we can censor certain user information when making it available to companies, in ways such as withholding their digital identity (email/username)

Travollio's target audience is all travelers without discrimination. As a result, the application should be designed in a way such that as many users as possible can benefit from it.

- To do this Travollio will be designed to run on both the Mac and Windows platforms to be more easily accessible
- Additionally, Travollio will be designed with non-computer experts in mind, while maintaining that their users likely aren't complete beginners

Travollio is intended to be used daily on a journey to make the traveler's job easier once they return to complete their journal. This means it should be accessible wherever the travelers are throughout the world.

- To comply with this Travollio will be designed so as not to require internet connectivity for necessary functions, editing, adding locations, etc.



1.7 Recommendation

Hyperion-Gold's recommendation is that any concerned party, company shareholders, managers, Wanderer's Tools, etc. read through this document to ensure all pertinent questions are answered. Any issues with this document, content-wise or not, should be brought back to Trent Howell, Hyperion-Gold's software engineer spearheading this system, so that he can fix them. Wanderer's Tools, the company that has chosen us to partner with them in creating Travollio, will work with us to ensure the vision of this project remains intact. Going forward, to help ensure the usefulness of this product we also recommend utilizing focus groups on our prototypes. All in all we see great potential in this project and look forward to seeing its completion and how it will benefit Wanderer's Toolkit.

1.8 Document Overview

To fully answer all the questions involved with Travollio this document continues in another six major sections, as well as another three at the end for reference.

1. System Initiation

- 1.1. This section will contain all the information that lead up to the creation of this proposal, including the system request from Wanderer's Tools and the response letter from us here at Hyperion-Gold

2. Feasibility Assessment

- 2.1. This section will work to answer all the questions about the feasibility of Travollio as a system, along with answering any additional related questions

3. Requirements Definition

- 3.1. This section will outline all the requirements Travollio will have to satisfy in order to become the envisioned system

4. Requirements Model

- 4.1. This section will contain expressions about how we envision people will use Travollio and the different components that will make it up

5. System Evolution

- 5.1. This section will include any possible upgrades that can be applied to Travollio after its initial release

6. Conclusion & Recommendations

- 6.1. This section will sum up everything preceding it as well as recommend how to move forward with Travollio

7. Glossary, Appendices, & Bibliography

2.0 System Initiation

2.1 System Request

October 1st 2018

SYSTEM REQUEST – Travel Journal

Project Sponsor

Name: Ms. Elaine Weltz

Representing: Wanderer's Tools

Phone: 206.281.3639

E-mail: eweltz@spu.edu

Opportunity Statement:

Lots of people love to travel. And people who love to travel often like to write about their experiences, take pictures and videos, track expenses, and describe memorable sites they have seen. As part of a proposed "toolkit" for travelers, Wanderer's Tools envisions an "integrated" travel journal tool for capturing the memories of a trip of any kind.

Proposed Product:

Background and Context:

It may be a week at the beach with the family, a road trip to parts unknown, a European Cruise, a semester abroad: we engage in all kinds of travel these days. Be it long or short, near or far, travelers love to keep track of the details of their travels. The problem is, these details can be of different types: images, videos, word processor entries, paper receipts, maps...and the list goes on. The job of gathering all of this together in a single place once one returns home is time-consuming enough (and confusing if the trip is a long one) that most people don't bother. They wish that the pictures of Berlin could somehow be related to the written impressions, purchases, and details of places visited while in the city, but it never happens. WE THINK WE CAN HELP THEM WITH THAT!

Initial Vision and Scope:

We are thinking of an app for laptop and tablet computers. It would likely need to be able to work with other devices, for example, smart-phones and cameras for image and video capture. The idea is that travelers could quickly update their journal every day (or so) while on the road as opposed to having to come home with tons of vaguely organized pictures, receipts, and random impressions that need to be organized after-the-fact. They can enhance entries at any time; we just don't want to *make them* wait until the trip is over. We know from personal experience that one comes home all fired-up to create a trip log, but few actually do it.

Here are some initial thoughts on what we might provide for our client-users:

- The ability to keep a written travel journal with pictures, videos, housing and meal notes and expenses, purchases, maps, and other trip information all using a single tool.
- A way to integrate all of the different pieces of trip information into a single integrated history. This seems probably best organized day-by-day, although being able to organize it in other ways could be nice.
- A tool that is easy to use, so that a journal can be kept up-to-date during the trip by spending only a few minutes each evening reliving the day's events, but also robust enough that there is the option to add to and enhance a trip record at any time.
- The ability to select and pull out different pieces of a trip into a kind of travelogue that can be shared with friends and family.

We know this is not everything this kind of tool could do, but hope this gives us a starting point.

Stakeholders Identified:

- People who travel and want to be able to quickly and easily keep a record of their journeys.
- Travel agents and trip planners
- Others in the travel and tourism industries
- Wanderer's Tools – we hope this will be the first of several helpful tools for people who want to see the world!
- Of course, you as our partners!

Expected Benefits:

- A better way to record one's travels on the road than by random text entries that are difficult to relate to other trip artifacts.
- A better way to keep track of trip pictures and videos than as a large collection of unmarked – and uncaptioned – picture files. It might even encourage users to sort through their pictures while still on the road!
- Enhanced ability for travelers to recall the details of their trips when they return home.
- No need to organize trip artifacts after the fact: you can return home with just the images, impressions and information you know you want to keep.
- Travel agents and trip planners might be able to use journal information to help clients plan possible future journeys.

Special Issues or Constraints:

Our prospective client-users will include a wide range of ages (probably college-age through retired seniors) and computing skill levels. It is unlikely that a true computer novice or phobic would be interested in this type of tool, so it doesn't have to be "super simple". But it needs to be intuitive for a person who knows their way around things like word processors, spreadsheets, simple image editors, and the web.

Also, we expect we will have users who prefer Mac and users who prefer Windows. Both platforms must be supported. Being able to go back and forth between the two would be even better.

You can let Wanderer's Tools worry about exactly how this will be funded. We are currently considering a low cost, but paid, download or subscription as opposed to a strictly ad-based model. We have the capital to fund your development costs for now, assuming they are within reason. We do not have a strict timeline for completion. But since this is the first of a series of tools, we would like to have it available for distribution sooner rather than later if for no other reason than to help fund future tools.

We understand that web access would be needed for things like map downloads or GPS tracking of where a traveler has been or a site is located, and that "storage in the cloud" is very popular and safe these days. Our only concern along these lines is that Internet access is not universal in all places to which people travel. So it would seem that at least basic tasks (for example, written journaling, organizing and saving media, entering data into expense records) need to be able to be handled even when the Internet is not available.

We would like to avoid having this be an app that opens our users up to a barrage of random requests to rate places they have seen, or to unending lists of places they might want to travel to...if that is still possible in 2018.

2.2 Response Letter

Hyperion-Gold Software, LTD.



October 11, 2018

Ms. Elaine Wertz, CEO
Wanderers Tools
241 Miller Street,
Seattle, WA 98119

INTEREST IN NEW TRAVEL JOURNAL APPLICATION. WE CAN HELP!

Ms. Wertz we appreciate you reaching out to us about the possible development of your company's new proposed Travel Journal App. After reading through your request our interest was piqued by the potential of this idea, we believe we can help you bring this dream to life.

We here at Hyperion-Gold are also avid travelers and have experienced the difficulty of pulling together all the trip details to look back on later. So many of a trip's details are in such varied forms that it is easy to lose track of the smaller, yet equally important, aspects of one's travels. We already have many ideas for reconciling all this varied data in a way that will make travelers lives easier. Templated journals may be a good way of making the tool easy to use for those who are less technologically adept.

After reviewing your proposal, we also believe an important aspect of this application should be the ability to share your "travel journals" easily with friends and family. Sharing the details of one's travels is one of the most important aspects of keeping such a journal. We believe that our firms experience with social media development can be of great use in this regard. Using similar methods for sharing experiences can help travelers share their experiences in a more familiar way making your application more approachable (as well as collecting data in a more easily marketable format).

Our firm is also well experienced with the Agile process which I believe is going to be ideal for reaching your goal of a quick release. Being travelers ourselves we feel confident with creating a system that would work well for other travelers. Additionally, our previous work with travel agencies gives us an idea of how they may want this kind of app to be built for them to be able to benefit from it as well.

We are very excited about this project and hope that you see our enthusiasm and find that our skills are well suited to the task at hand. Let me know what you think, I'm looking forward to working with you and hope you feel the same.

Trent B. Howell

Software System Engineer

3.0 Feasibility Assessment

3.1 Introduction

This section is dedicated to exploring the feasibility of Travollio, in as many aspects as possible. To do this we will be rating the feasibility of different aspects of it, for this purpose we are going to use a five-point scale. Our scale will start with **Highly Feasible**, this means that the target aspect has a very low margin of risk given the factors influencing it. Secondly, we have **Feasible**, this means that there is a low but real margin of risk. Thirdly, will be **Moderately Feasible**, this means that there is a medium risk margin and steps should be taken to address this while working on the project. Additionally, is **Questionable**, this means that there is a high margin of risk and this area should be more carefully approached to ensure we address the high risk. Finally, we have **Unfeasible**, this means that there is a seriously high margin of risk and likely a subject that will need to be re-thought so that we can eliminate enough of its risk to become at least questionable or better.



3.2 Feasibility Analysis

In order to fully address the possible areas of feasibility this part of the section will be separated into five different subjects of feasibility. Beginning with Technical Feasibility which measures our ability to successfully design and deliver Travollio. Next, we will address Resource Feasibility which measures if we have, or can gain, access to what we need to develop Travollio. Thirdly we will approach Schedule Feasibility which has to do with our ability to meet our time constraints for developing Travollio. Organizational Feasibility will be next which will be a measure of how likely Travollio will be to become an effective and well used solution to the problem it is attempting to address. Finally, we will address Legal and Contractual Feasibility which has to do with legal requirements that may affect Travollio and how successful we can be in addressing them.

Technical Feasibility

Overall the Technical Feasibility is **Feasible** based on the following components:

- User Familiarity: In today's world people are very accustomed to using social media to create usable content with varied pieces of data. While we may need to include a help page, and possibly a tutorial to help guide users most of the aspects of Travollio should be recognizable to them. As such this makes this component **Highly Feasible**
- Analyst Familiarity: Hyperion-Gold has a lot of experience working with social media platforms where users create content and share it with their friends and family. However, we have not worked with video data before, and as such will need to learn more about that aspect. Overall this makes this component **Moderately Feasible**
- Project Size: We see Travollio has having only one or two major parts, these being the journaling app itself, and the method of sharing the journal. Having at most two main components we should be able to apply enough manpower to each to properly complete them. This component is therefore **Highly Feasible**
- Project Structure: The structure of the project is not very clearly defined, while its purpose is clear the way it will be set up is not. Hyperion-Gold however has much experience using the SCRUM AGILE design method and if we decide to adopt this approach for Travollio the unclear structure is unlikely to be a major hinderance. This component as such is **Feasible**

Resource Feasibility

Overall Resource Feasibility is **Highly Feasible** based on the following components:

- Staff: Hyperion-Gold has a moderately sized staff who all have experience working with relatively similar concepts. As such this component is **Feasible**
- Hardware: Hyperion-Gold has access to enough development level computers to supply all its staff as well as several test servers and multiple workbenches to test additional hardware setups. Therefore, this component has been measured as **Highly Feasible**
- Software: Hyperion-Gold has all the necessary software to design and develop Travollio. This component is as a result **Highly Feasible**
- Funding: Wanderer's Tools has offered to provide any and all funding for Travollio and has a wide base of resources to draw from. Resultingly this component is also **Highly Feasible**

Schedule Feasibility

Overall Schedule Feasibility is **Moderately Feasible** based on the following components:

- Available Time: We have an unspecified amount to get this system finished in, this will make assessing when Travollio is ready to go to market more difficult. As such this component is **Questionable**
- Resource Collection: All the necessary resources to start development of Travollio we already have in our possession. Therefore, this component is **Highly Feasible**
- Design Method: In order to make reaching our deadline more possible Hyperion-Gold is planning on using the AGILE development process, as such we should be able to pull together a useable version of Travollio by our deadline. As a result, this component is **Feasible**

Organizational Feasibility

Overall Organizational Feasibility is **Feasible** based on the following components:

- Consumer Need: In terms of a solid travel journal application there is no real competitor on the market currently, and through our own studies we have found that there is a moderate interest in a product of this kind. Therefore, this component is **Feasible**
- Approachability: Travollio, as we plan to design it, will be similar to most word processing tools, with the addition of built in tools to help support the types of data more specific to travelling. As such this component is **Feasible**

Legal & Contractual Feasibility

Overall Legal & Contractual Feasibility is **Feasible** based on the following components:

- User Data: We plan on allowing certain travel companies access to specific user data that may be useful to them. However, we will contain this in a disclaimer that users must agree to for the use Travollio. Additionally, we will limit the types of data that are accessible so specific user information is not compromised. This component is **Feasible**
- Licensing: We plan on using development software Hyperion-Gold already has licenses for in the production of Travollio. Therefore, this component is **Feasible**
- Data Theft: Currently the most sensitive information we plan to store about users are their email and password. While this data may be stolen the kind of data that we may be liable for losing is not of great importance. As such this component is **Moderately Feasible**

3.3 Additional Comments

- We should ensure through surveys the kind of data our general audience is okay with us providing to travel companies to avoid angry consumer boycotts.
- Focus groups should be used throughout the development to minimize the risk of Travollio becoming useless to travelers.
- Resource analysis should be conducted throughout to make sure that we continue to have everything we need to make Travollio a success.
- Wanderer's Tools should provide a more specific deadline or at the very least a rough estimate so that we can plan more on a reliable schedule.

3.4 Conclusion

Overall there are no major issues with Travollio's feasibility as far as we are able to tell from this point in the project. While we can see the potential of this product and we have made initial surveys to tell user demand we should continue to do this to ensure we are working on a product that has a use. Additionally, our biggest issue is with our time frame, Wanderer's Tools has been vague on this issue so far and that makes it more questionable for our ability to deliver Travollio on time. Therefore, we really would like to emphasize that Wanderer's Tools should provide us with a more solid deadline, so we have more of an idea of how to plan our development. If these requests are fulfilled then we are sure this project will go off smoothly, and we are confident in to fix any issues that may surface throughout development.

4.0 Requirements Definition

4.1 Introduction

This section is intended to provide a clear idea of the necessary components of Travollio and what it needs to include to live up to its expectations. In order to fully cover this topic our Requirements definition will include Functional, Data, and Nonfunctional requirements. Functional requirements include what Travollio must do in order to become the imagined system. Data requirements include specific ways data will be formatted as well as what data will be collected. Nonfunctional requirements include what characteristics and attributes the system must have, including constraints. Ideally this will create a clearer picture of what Travollio really is and how it is intended to function upon completion. In the next section a graphical layout utilizing these requirements will also work to create a complete picture of Travollio to fully convey the vision we have for this system.



4.2 Functional Requirements

Account

Create: Must allow Travelers to create a user account and choose to pay or use the free version of Travollio.

Edit: Must allow Travelers to edit their user account information should they desire.

Sign-In: Must allow Travelers to sign into their user account and verify whether they have access to the paid version or not and adjust the application accordingly.

Create a Travollio (Journal project)

Set Parameters: Must allow Travelers to set the name of the project, time-frame, planned destination(s), project name, and allow them to choose a theme for their journal project.

Set Reminders: Must allow Travelers to set whether they wish to be reminded during their trip to add to their journal, and if so, how frequently as well as their method of reminder.

Create new entry

Initialize: Must allow Travelers to set the date(s), and location the new entry will cover and select a templated page or a blank page to use.

Add Entry Data: Must allow Travelers to access the Add page data module if they want to start adding data to the entry.

Edit Journal

Change: Must allow Travelers to change the initial information of a specific entry such as date(s) and location. As well as allow for Travelers to change initial Journal parameters including time-frame, destination(s), project name, and theme.

Add Entry Data: Must allow Travelers to access the Add entry data module of a specific entry if they want to input more data for the entry.

Modify Data: Must allow Travelers to move data in the entry to new location, change object size, replace with data of the same kind, or resize the object.

Remove Data: Must allow Travelers to remove data they have previously added.

Add entry data

Add Picture: Must allow for the integration of a picture file into the current entry, upon initial integration the Traveler must be able to change the shape of the picture, as well as its position on the page.

Add Video: Must allow for the integration of a video file into the current entry, upon initial integration the Traveler must be able to change the shape of the video viewer the video is bound to, as well as its position on the page.

Add Text: Must allow for the integration of a text box into the current entry, upon initial integration the Traveler must be able to add and remove text to the text box, as well as change the shape it is bound to, and its position on the page.

Compile Travollio (Trip Journal)

Parameter Edit: Must allow the Traveler to change the initially set up Journal parameters, including time-frame, destination(s), and the project name.

Compile: Must wrap all the Journal project and its data into a compressed file readable by the Travollio application's view function.

Publish: Could format all the Journal's data into a shareable format fit for common social media platforms, must only be allowed upon a trip's conclusion.

Share Journal

Send as Attachment: Must allow the Traveler to send a compiled Journal as an attached file in an email or other similar medium.

Send Direct: Must allow the Traveler to send a compiled journal to another Traveler directly through Travollio.

Share To: Could allow the Traveler to share a published version of their Journal to the social media platform of their choosing.

Send Raw: Must allow a Traveler to send, or share directly through Travollio a raw version of their Journal to another Traveler so they can also edit the Journal.

View Travollio (Compiled Trip Journal)

Open in Travollio: Must allow a Traveler to view a shared Journal through the Travollio application, it should look the same as it did to the sender, editing tools must be locked out in this mode.

View Rough: Must allow a Traveler's Friend to view a shared Journal in a pdf format, it should look similar to how it appeared to the sender in the Travollio application.

Access Generalized User Information

View User Info: Must allow Wanderer's Tools or another system Administrator to access the specific data used to set up a Traveler's account, excluding their protected credit card information. This information should not be viewable by non-Administrators.

View Destination Popularity: Must glean from shared Journals how popular certain destinations are and provide this data to partnered Travel Companies for their own systems to sort. Should allow for Travel companies to draw data for countries, regions, and cities.

View Activity Popularity: Must glean from shared Journals how popular specific activities are and provide this data to partnered Travel Companies for their own systems to sort. Travel Companies should be able to choose if they want this data to include Destinations to determine what destination specific activities are more popular at.

4.3 Data Requirements

User Data: Travollio must retain data from user accounts

1. User Data will contain username, name, age, email address, payment option, payment method information.
2. Username will be unique to each account and can be any length.
3. Age will be stored as both the raw number and the specific date of birth specified.
4. Email address will include every email provider.
5. Payment option will be a number corresponding to the user's choice between, annual fee, or a much larger one-time payment.
6. Payment method will be either the credit card number, if direct payments was used, or the PayPal information, these can be easily used in the future for new products from Wanderer's Tools or in the case that a user uses an annual payment option.

Shared Data: Travollio must pull data from shared journals for Wanderer's Tools

1. Shared data will contain Destinations visited, Length visited, and Activities.
2. Destinations visited will contain a list of destinations listed in the entries of the Traveler in their shared Journal project.
3. Length visited will contain two parts, length at destinations and length overall
4. Length at destinations will be a list paired with destinations visited and contain the time given in each entry for how long a Traveler stayed at a destination
5. Length overall will contain the raw number of days and hours a Traveler specified throughout their Journal as having spent Travelling on the given Trip.
6. Activities will contain a list of activities the Traveler has recorded as having done, these activities will be in a list paired with the list of destinations they occurred.

Journal Data: Travollio must contain the base Journal data in an easy to parse method

1. Journal Data will contain three major aspects, main data, entry data, and participant data.
2. Main data will contain the overall Journal's name and the length of time the Journal covers.
3. Entry data will contain the entries destination, the length of time the entry covers, and the number of pages the entry takes up.
4. Participant data will contain a list of the usernames, and emails, of the journal's participants, only applicable if the journal is edited by more than one account.

4.4 Nonfunctional Requirements

Operational Requirements

1. Travollio must run on IOS, Android, Windows, and Mac at launch.
2. Travollio must be usable without a constant or consistent internet connection.
3. Journal projects will be stored locally on the Traveler's device.
4. Themes must be consistent and attractive.
5. Annual Payment Travelers must cancel their subscription before the roll over date to avoid a charge on their account.
6. Destinations in a Journal could be confirmed with a location system such as Google Maps if the Traveler deems it necessary.

Performance Requirements

1. Journal compile times must remain brief and concise to save Traveler's from frustration, time per page should be no more than 3 seconds.
2. Tools must be easy to locate and use.
3. Application must take up no more than 250MB of RAM at its peak.

Efficiency Requirements

1. Travollio must save last worked on Journal to the home page to save the user time when launching the program to work on their current Journal.
2. Travollio must auto-save work every minute to save users from work loss.
3. Travollio must locally save a user's payment confirmation to keep the program from having to connect online to verify purchase.

Security and Control Requirements

1. All user account information must be encrypted and sensitive information (email, payment method, password) will not be sharable to other companies.
2. System Administrator accounts will only be accessible from Wanderer's Tools, and Hyperion-Gold's respective headquarters.

5.0 Requirements Model

5.1 Introduction

In order to properly convey the basic functionality and idea behind Travollio and its use, this section displays and analyzes a use-case diagram. This diagram will outline the way we envision Travollio interacting with its environment in a more visual manner to convey its basic functionality. After the diagram each use case will be broken down and explained in greater detail. In order to properly convey Travollio's use the diagram will utilize certain visual components, here we will describe the meaning and function of each.



Actor: Some human participant in the Travollio system



Use Case: An element of functionality for the Travollio System



Includes: Represents a case that is necessary for the base case

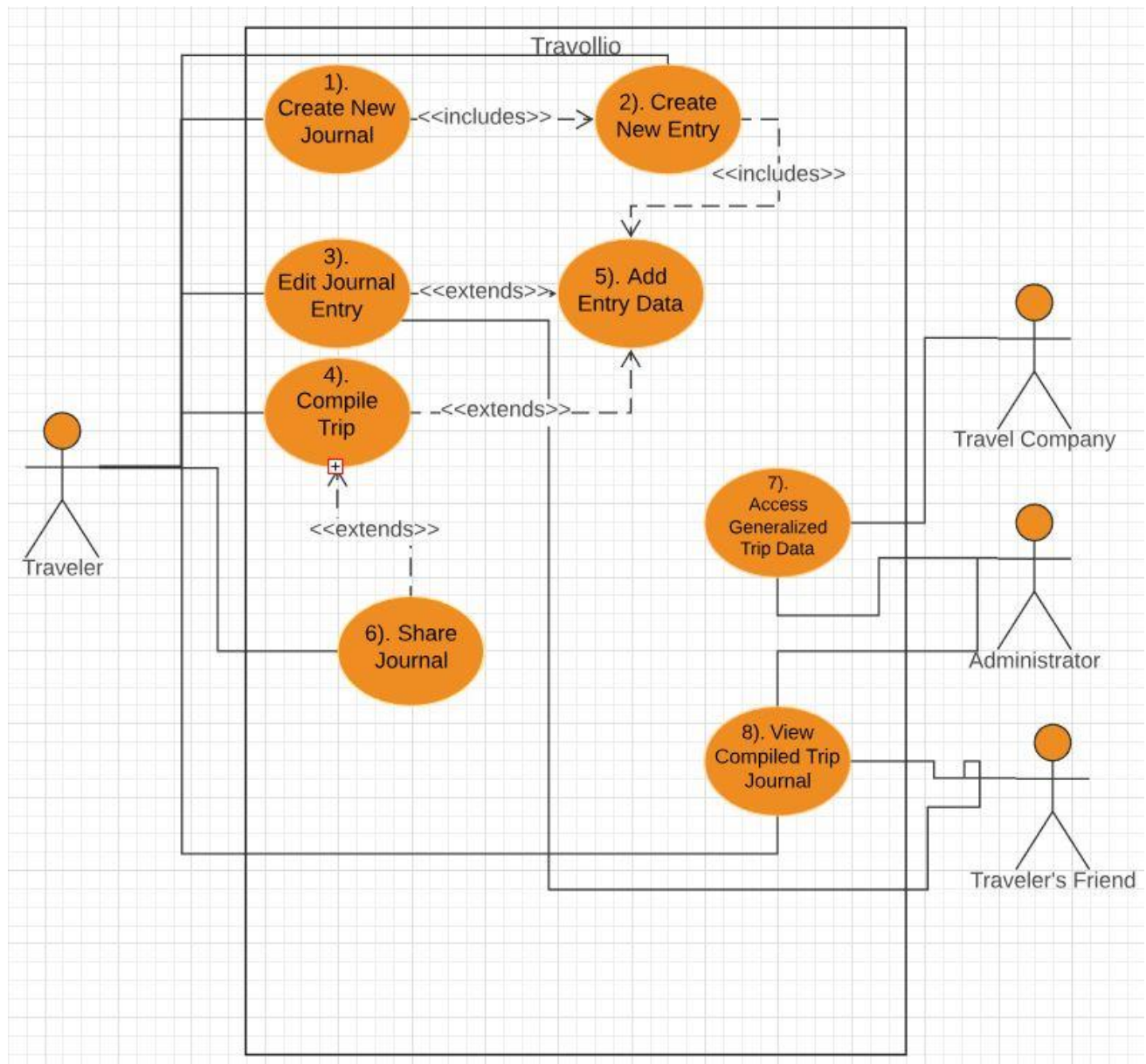


Extends: Represents a case that can be included in the base case



Association: Represents that an object has some form of relation to the case

5.2 Use-Case Diagram



5.3 Use-Case Descriptions

Use-Case name: Create New Journal	ID: 1	Importance: High
Primary actor: Traveler	Use-Case type: Detail, Essential	
Stakeholders and interests: Traveler – Wants to make a new trip Journal project		
Brief description: This use case describes a Traveler starting a new Journal project and setting up the initial details for the project going forward		
Trigger: Traveler selects the create new Journal button on the main page of Travollio		
Type (circle one): <u>External</u> Temporal		
Relationships: Association: Traveler Include: 2, Create New Entry Extend: Generalization:		
Normal flow of events: <ol style="list-style-type: none"> 1. Traveler selects create new Journal button 2. Travollio performs S-1: Verify user 3. Traveler enters the name of the Journal 4. Traveler specifies dates covered by the Journal 5. Traveler selects a theme, or a blank theme, for their Journal 6. Traveler selects if they wish to be reminded to use Travollio throughout their Travels 7. Traveler is prompted to create a new entry 8. Traveler confirms creation of a new entry and 2 Create New Entry is performed 		
Subflows: S-1: Verify user <ol style="list-style-type: none"> 1. Travollio access the Traveler's account 2. Travollio connects to the user database and verifies that the user has paid for Travollio 3. Travollio allows the Traveler to proceed creating a Journal 		
Alternate / exceptional flows: <ol style="list-style-type: none"> 2a. Travollio notifies the user that they need to purchase Travollio to create a Journal 8a. Traveler denies creation of a new entry 		

Use-Case name: Create New Entry	ID: 2	Importance: High
Primary actor: Traveler	Use-Case type: Detail, Essential	
Stakeholders and interests: Traveler – Wants to add a new entry to an existing trip Journal		
Brief description: This use case describes a Traveler creating a new entry for a Journal project and setting up the initial details for the entry		
Trigger: Traveler selects the add new entry button in a Journal project		
Type (circle one): External Temporal		
Relationships: Association: Traveler Include: 5, Add Entry Data Extend: Generalization:		
Normal flow of events: <ol style="list-style-type: none"> 1. Traveler selects add new entry button 2. Traveler enters the destination(s) visited in this entry 3. Traveler enters the time this entry covers 4. Traveler selects to use a templated page 5. 5 Add Entry Data is performed 		
Subflows:		
Alternate / exceptional flows: <ol style="list-style-type: none"> 2-3a. Traveler enters no initial data 4a. Traveler selects to use a blank page 		

Use-Case name: Edit Journal Entry		ID: 3	Importance: High
Primary actor: Traveler		Use-Case type: Detail, Essential	
Stakeholders and interests: Traveler – Wants to edit an existing entry in an existing trip Journal			
Brief description: This use case describes a Traveler, or Traveler’s Friend editing the contents of an existing Journal entry			
Trigger: Traveler, or Traveler’s Friend selects the edit entry button in a Journal project			
Type (circle one): External Temporal			
Relationships: Association: Traveler, Traveler’s Friend Include: Extend: 5, Add Entry Data Generalization:			
Normal flow of events: <div><div>1. Traveler selects edit entry button</div><div>2. Traveler changes overall Journal data, including Journal name, timeframe, and theme.</div><div>3. Traveler changes overall entry data, including entry destination(s), timeframe, and template</div><div>4. Traveler adds new entry data to an entry (5 Add Entry Data is performed)</div><div>5. Traveler edits existing entry data in an entry, includes changing shape, placement, and size of data objects.</div></div>			
Subflows: S-1: Verify user <div><div>1. Travollio connects to user database (if possible)</div><div>2. Travollio verifies that the Traveler who created the Journal shared it with this Traveler</div><div>3. Travollio allows editing of the entry by the new Traveler (Traveler’s Friend)</div></div>			
Alternate / exceptional flows: <div><div>1a. Traveler’s Friend selects edit entry button (S-1: Verify user is performed)</div><div>S1.3a. Traveler’s Friend is prompted that they don’t have access to edit this Journal</div><div>2a. Traveler doesn’t change overall Journal data</div><div>3a. Traveler doesn’t change overall entry data</div><div>4a. Traveler doesn’t add new entry data</div><div>5a. Traveler doesn’t edit existing entry data</div></div>			

Use-Case name: Compile Trip Journal		ID: 4	Importance: High
Primary actor: Traveler		Use-Case type: Detail, Essential	
Stakeholders and interests: Traveler – Wants to compile and finish a trip Journal			
Brief description: This use case describes a Traveler compiling and finishing a trip Journal off to put it in a sharable state			
Trigger: Traveler selects the compile Journal button in an existing Journal project			
Type (circle one): External Temporal			
Relationships: Association: Traveler Include: Extend: 5, Add Entry Data Generalization:			
Normal flow of events: 1. Traveler selects compile Journal button 2. Traveler is prompted to make final change to overall Journal data, including time-frame, theme, and project name. 3. S-1: Final Entry Edits is performed on the first entry 4. Travollio compiles and wraps all data up into a sharable Travollio file type			
Subflows: S-1: Final Entry Edits 1. Traveler is prompted to edit overall entry data, including destination(s), time-frame, and template for one final time 2. Traveler is prompted to edit entry data, including shape, size, and position of data objects for one final time 3. Traveler is prompted to add entry data for one final time (5 Add Entry Data is performed) 4. S-1: Final Entry Edits is performed on the next entry			
Alternate / exceptional flows: S1.3a. Traveler denies adding entry data S1.4a. There is no next entry			

Use-Case name: Add Entry Data	ID: 5	Importance: High
Primary actor: Traveler	Use-Case type: Detail, Essential	
Stakeholders and interests: Traveler – Wants to add new data into an existing Journal entry		
Brief description: This use case describes a Traveler adding new data of some supported format into an existing Journal entry		
Trigger: Traveler is editing, or creating a Journal entry and selects to add data		
Type (circle one): <u>External</u> Temporal		
Relationships: Association: Traveler Include: Extend: Generalization:		
Normal flow of events: <ol style="list-style-type: none"> 1. Traveler select a data object shape and places it somewhere in the entry 2. Traveler changes shape and size of data object shape to how they want it 3. Traveler adds data to the data object shape performs S-1: Verify Data 4. Prompt user that data was added successfully 		
Subflows: S-1: Verify Data <ol style="list-style-type: none"> 1. End if data added is a text box 2. Check what type of data was added 3. Check that video data (if added) is less than 5 minutes in length if so end 4. Check that picture data (if added) is less than 10MB in size 5. Check that other data (if added) is less than 25MB in size 		
Alternate / exceptional flows: <ol style="list-style-type: none"> 3a. Traveler keeps the data object shape as simply a decorative shape, adding no data 4a: If data is not verified prompt the user of the cause and tell them data was not added 		

Use-Case name: Share Journal		ID: 6	Importance: High
Primary actor: Traveler		Use-Case type: Detail, Essential	
Stakeholders and interests: Traveler – Wants to share their Journal either for a Friend to view or to edit			
Brief description: This use case describes a Traveler preparing and sharing their Journal to a Friend			
Trigger: Traveler selects the share Journal button on either a finished Journal or an unfinished Journal			
Type (circle one): External Temporal			
Relationships: Association: Traveler Include: Extend: 4, Compile Trip Journal Generalization:			
Normal flow of events: 1. Traveler selects a Journal project they wish to share 2. Traveler shares Journal as attachment 3. S-1: Share Finished Journal is performed			
Subflows: S-1: Share Finished Journal 1. Compiled Journal is set as an attachment 2. Generalized trip data is extracted, including destination(s), time traveling, and activities 3. Generalized trip data is uploaded to Travollio trip data database 4. Compiled Journal is sent through the Travollio system to another Traveler S-2: Share Unfinished Journal 1. Unfinished Journal is set as an attachment 2. Unfinished Journal is sent through the Travollio system to another Traveler 3. The target Traveler is provided edit access to the Journal			
Alternate / exceptional flows: 3a. S-2 Share Unfinished Journal is performed S-1.1a. If Journal isn't compiled 4 Compile Trip Journal is performed, then set as an attachment S-1.4a. The Compiled Journal is sent through an outside source as an attachment S-2.2a. The Unfinished Journal is sent through an outside source as an attachment			

Use-Case name: Access Generalized Trip Data	ID: 7	Importance: High
Primary actor: Administrator	Use-Case type: Detail, Essential	
Stakeholders and interests: Administrator – Wants to understand user statistics for future projects Travel Company - Wants to understand popular destinations and activities for Travelers		
Brief description: This use case describes an interested party accessing information gathered from compiled trip Journals		
Trigger: System administrator accesses the user database for Travollio, or a Travel Company requests information about travelers from a system administrator		
Type (circle one): <u>External</u> Temporal		
Relationships: Association: Administrator, Travel Company Include: Extend: Generalization:		
Normal flow of events: <ol style="list-style-type: none"> 1. Administrator logs into Travollio 2. S-1: Admin Confirmation is performed 3. S-2: Get Travel Data is performed 4. Travollio pulls remaining user data 5. Travollio provides information to accessing user 		
Subflows: S-1: Admin Confirmation <ol style="list-style-type: none"> 1. Travollio database analyzes user information 2. Travollio compares information with admin database 3. Travollio confirms admin privilege and allows access S-2: Get Travel Data <ol style="list-style-type: none"> 1. Travollio access its user database 2. Travollio pulls the destination(s) data 3. Travollio pulls the time-spent data 4. Travollio pulls the activity data 		
Alternate / exceptional flows: <ol style="list-style-type: none"> 1a. Travel Company requests data 2a. Admin logs into Travollio 3a. S-1: Admin Confirmation is performed 4a. S-2: Get Travel Data is performed 5a. Administrator sends pulled data to Travel Company S1.3a. Travollio denies admin privilege and the user is notified 		

Use-Case name: View Compiled Trip Journal	ID: 8	Importance: High
Primary actor: Administrator	Use-Case type: Detail, Essential	
Stakeholders and interests: Administrator – Wants to get good examples of Travollio Traveler – Wants to review a previously created trip Journal Traveler's Friend – Wants to view a finished Journal sent to them by a Traveler		
Brief description: This use case describes an interested party obtaining and viewing a completed and compiled trip Journal		
Trigger: A user with access to the trip Journal file opens in view mode		
Type (circle one): External Temporal		
Relationships: Association: Traveler's Friend, Traveler, Administrator Include: Extend: Generalization:		
Normal flow of events: <ol style="list-style-type: none"> 1. A compiled trip Journal file is accessed 2. The Journal file is opened in view mode in Travollio 3. A polished version of the Journal is displayed 4. Viewer changes page when they are finished viewing the previous page 5. Viewer finishes looking through the Journal 6. Viewer closes the file 		
Subflows:		
Alternate / exceptional flows: <ol style="list-style-type: none"> 1a. An Administrator access an uploaded compiled trip Journal from the Travollio database 4a. Viewer flips back to a previous page 		

6.0 System Evolution

While the use cases cover the idea of the first iteration of Travollio other components have surfaced that may be quite useful to users in future versions. More new features may be suggested after Travelers have had a chance to use Travollio. As it stands these are the ideas we have, to work on, after the release of Travollio's first public build.

- **Social Media Publishing:** One of the first things we noticed in developing Travollio was its potential as a tool for organizing social media posts about Traveler's journeys. However, we do not want to open our Travelers up to advertising their absence to the world. So, we plan to work on finding a good method of making our travel journals social media friendly while keeping users safe from themselves.
- **Multiple Traveler Journals:** While we have planned for a built-in method of sharing raw Journal projects with other travelers to have co-operatively made Journals as a possibility, we want to implement an easier way to do this. To address this, we plan on working on a cloud-based system for Journals where the projects are hosted on a partnered cloud company server and multiple users can add to the project simultaneously.

All these ideas as well as included system maintenance will keep Travelers interested in our system and ensure we have a longer system life-span. Each of these changes is highly recommended to keep Travelers happy and ensure Travollio grants Wanderer's Tools a good reputation with its potential customers.

7.0 Conclusions & Recommendations

Travollio is plainly a system that should be built for the benefit of Travelers everywhere, as well as to get Wanderer's Tools into their marketplace. Development should start as soon as possible in order to ensure Wanderer's Tools can get their name out there to their customers as quickly as they seem to desire.

Travollio has been found to be an incredibly feasible system with only a few issues standing out, each of those however has a good and obtainable solution. Travollio's usage overview stands clear and covers all the basic and important functionality that makes Travollio the system it is envisioned to be. Requirements for this system have been thoroughly explored to ensure development stays on track and that we are all on the same page as to the way this system will work. Overall, we have a clear heading and no good reason to delay development of the system.

In order to address the issues that would lead to a developmental delay of Travollio we recommended the following actions be taken:

- A clear and unambiguous time-frame should be agreed upon by those within Wanderer's Tools to avoid confusion in our development time-line.
- Licenses for the systems we believe Travollio should run on should be obtained immediately to avoid a development in delay as we reach the end of our development cycle
- Testers should be obtained so we can run focus groups on Travollio as we develop it to avoid creating a system that ends up being unusable to our target audience

Appendices

On the 29th and 31st of October Hyperion-Gold conducted a Q&A session with Ms. Weltz in order to get more of an idea about specific aspects of Travollio. During which we determined the following.

We should avoid allowing our Travelers to be spammed with ads

Our opening screen should be welcoming

Travollio should be completed by roughly June

Cloud Backup is okay but shouldn't detract from the ability to use Travollio without a connection to the internet

Wanderer's Tools has no preference between paid subscription and one-time payment

Concern over social media connection letting people know our Travelers are out of town while they are away

Glossary

Travollio: The travel journal system being developed by Hyperion-Gold for Wanderer's Tools.

Traveler: General term for a user of the Travollio system.

Data: General term for different mediums of information, includes videos, pictures, receipts, and text entries.

Journal: A collection of information pertaining to the Traveler's Journey through one or multiple destinations.

Entry: A collection of information inside of a journal spanning one or more pages about a specific day, or set of dates in a Traveler's Journey

Object: A medium used to anchor data to an entry in a Journal, usually affects how it is represented visually on the page, ie. Shape, position, and size

Bibliography

Use Case Diagrams created using LucidChart <https://www.lucidchart.com>

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Dennis Wixom and Tegarden "System Analysis and Design: An Object Oriented Approach With UML, 5th Edition". Hoboken, NJ: Wiley, 2010. Print.

Q&A with Ms. Weltz.pdf

Examples used for reference:

5K Food Sys Prop – 1.pdf

Cuisine by Car Proposal – 1.pdf

Cuisine by Car Proposal – 2.pdf