Prepared for:
MIS 322
Professor Rose
Washington State University,
Vancouver

Deliverable #5

Prepared By:
Carina York
Chase Fenn
Cody Smith
Molly Bartley

Table of Contents

Team Organization

Molly Bartley

Summary of Changes 100%

Data Dictionary 33%

Logical Process Descriptions 33%

Executive Summary 50%

Project Description 50%

Project Feasibility 10%

Forms 85%

Dialog Diagrams 85%

Training Plan 100%

Gantt Chart 3 100%

Carina York

Data Flow Diagrams 25%

Project Description 5%

Project Feasibility 50%

Executive Summary 50%

Forms 5%

Dialog Diagrams 5%

Maintenance Plan & Strategy 100%

Testing Plan 100%

Metrics and Milestones 100%

Implementation Plan 100%

Gantt Chart 2 100%

Chase Fenn

Gantt Chart 1 100%

Decision Matrix 100%

Design and Acquisition Plan 100%

Documentation Plan 100%

Data Dictionary 66%

Data Flow Diagrams 50%

Logical Process Descriptions 33%

Technology Summary 50%

Project Description 45%

Forms 5%

Dialog Diagrams 5%

Cody Smith

Data Flow Diagrams 25%

Logical Process Descriptions 33%

Technology Summary 50%

Project Description 5%

Gantt Chart 4 100%

Forms 5%

Dialog Diagrams 5%

Decision Matrix 100%

Client Organization

Bartley Inspections, LLC.

Bartley Inspections, LLC is a small home inspection company with services including listing inspections, new construction inspections, onsite reporting, radon testing and pest inspections. Bartley Inspections is owned and operated by Erin and Amy Bartley. Erin is a licensed home inspector with over 30 years' of industry experience building custom homes and managing property. With only two employees, Erin manages all home inspections and Amy performs all bookkeeping and other administrative tasks.

Currently this business relies on a home inspection software solution called Inspect IT. Inspect IT is an application purchased by the company for a one-time fee of $1,200. This purchase allowed the application to be downloaded on two devices and requires an annual maintenance fee. Other than the current inspection application, the business is not utilizing any workflow automation, scheduling tool or CRM to track current and past customers. Because inspect IT is a remote application, and is not cloud based, it lives on Erin's personal iPad and cell phone. Amy currently does not have access to this device making the process of accessing, editing and distributing reports challenging. In addition, the tool does not contain any schedule management, or workflow automation to provide an organized way to keep track of where in the process each team member is in completing an inspection.

The majority of the customer base Erin serves comes from referrals provided by the companies connection with local real-estate agents. It is critical that the business is able to maintain a close relationship with as many local agents as possible so when the agents provide new home-owners with a list of home inspectors to choose from, Bartley inspections is on that list. For this reason, knowing which real-estate agents referred each client, and as a result knowing which agents are consistently bringing in business for the company, is very helpful. However, another limitation to the software Inspect IT, is that there is no way to maintain record of which real-estate agent recommended each client. This means there is currently no system that is tracking referrals which makes promotion and marketing very challenging. This limitation could be potentially solved with the addition of a CRM system, or a new home inspection software that allows for client tracking.

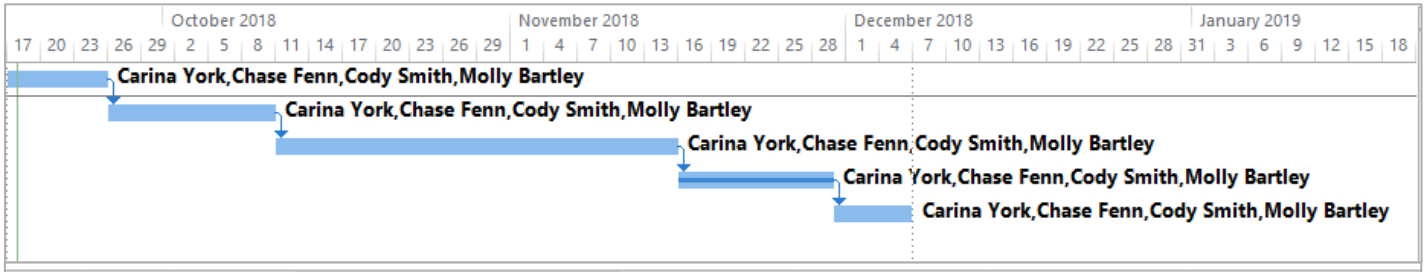
Given the current limitations of Inspect IT, the lack of any workflow automation, and no customer tracking software, our group believes Bartley Inspections could greatly benefit from an updated, cloud based inspections software that allows the user to access the tool from anywhere and on any device without the concern of failing hardware and remote access. We are also focusing on a solution to track customer referrals to help the business maintain a strong relationship with agents that are consistently referring clients. With these additions, and an in-depth analysis of the current process, Bartley Inspections could see improvements in efficiency and growth.

Contact Info:

BARTLEY
INSPECTIONS, LLC

Primary Contact: Erin Bartley, Owner
Cell: (360) 909-0719
Email: erinbartley@comcast.net

Gantt Chart



		Task Mode	Task Name	Duration	Start	Finish	Predecessors
1			Deliverable 1	7 days	Mon 9/17/18	Tue 9/25/18	
2			Deliverable 2	11 days	Wed 9/26/18	Wed 10/10/18	1
3			Deliverable 3	26 days	Thu 10/11/18	Thu 11/15/18	2
4	✓		Deliverable 4	10 days	Fri 11/16/18	Thu 11/29/18	3
5			Deliverable 5	5 days	Fri 11/30/18	Thu 12/6/18	4

Personal Involvement

Bartley Inspections, LLC was presented to the group by Molly Bartley. This organization is associated to Molly through family. Her father and step mother own and operate Bartley

Inspections. In selecting this organization as our focus, the close family connection will allow our group flexibility to decisions making and access to information that a larger business may restrict.

Executive Summary

Project Overview

As students in MIS 322 Enterprise Systems Analysis, and future MIS professionals, we are conducting an analysis on the information systems of Bartley Inspections, LLC. The result of this project will be an improved understanding of the current flow of information in place, and the identification of areas that can be made more efficient. By the end, we will have a proposal for an improved system to meet needs of the growing company.

More specifically, our team will be providing Bartley Inspections with an analysis of their current system, InspectIt, and evaluating what needs currently are not being met by the system. In order to recommend a new solution our group has had extensive interviews with Erin to determine what problems he's having and what his goals are for the business. We were able to determine that he is having issues with three major processes: client tracking, scheduling, report creation and distribution. We will discuss these issues in depth later in the report. We were also able to determine that Erin is hoping to grow his business enough to make home inspecting his primary occupation. He is currently splitting his time between inspections and doing general contracting work. The goal for this project would be to allow him the resources to put all his effort into home inspections and generate enough business to completely transition out of general contracting work.

Included later in this document is an in-depth project description including information and history of Bartley Inspections, followed by a comprehensive list of all the current problems their business is facing as they relate to the flow of information. We then go on to discuss what goals Erin has for his business and how a new system can support those goals. After a thorough project description, we then complete an assessment of the current technology available in market to support home inspectors. The summary reviews the current system InspectIt, and two new solutions: Spectora and Home Inspector Pro. The document also includes a Systems Service

Request where our team was given access and approval to complete the project and we provide timeline information and a Gantt chart to organize a timeline for the rest of the project.

Bartley Inspections

System Service Request

REQUESTED BY ____Carina York_____ **DATE** __October 9, 2018___

DEPARTMENT ____Business Analytics Department_____

LOCATION ____WSU Vancouver_____

CONTACT ____cell: (360) 521-133____e-mail: carina.serpevsky@wsu.edu_____

TYPE OF REQUEST	**URGENCY**
☒ New System	☐ Immediate – Operations are impaired, or opportunity lost
☐System Enhancement	☐Problems exits but can be worked around.
☐ System Error Correction	☒Business losses can be tolerated until new system installed

PROBLEM STATEMENT

Bartley Inspections has had an increase in the number of home inspections performed over the past year. The current information system being used to gather data during the home inspection process has limitations on access and has no back up storage. For a home inspection to be completed; one employee must attend the home, complete the inspection and input all data onto a tablet, then allow the second employee access to the data off the same tablet to then create the report. This inefficient process prolongs the time it takes to fully complete a home inspection from start to finish. Only allowing access to the data from the information system for one employee at a time creates an inefficient work flow and does not allow further growth beyond the current capacity. There is too much time spent physically transporting and transferring the data to compile a completed report. There is also no ability of organizing customer information, appointments, payments, history, and track realtor referrals through the current system.

SERVICE REQUEST

I request an analysis of the of the current daily operations from both employees at Bartley Inspections to understand and meet the needs of the business. There are many options of different systems that can allow

access for both employees using a cloud-based system. This system should also have the ability to store and organize customer information, appointments, payments, history, and track realtor referrals.

IS LIAISON __Erin Bartley cell: (360) 909-0719 e-mail: erinbartley@comcast.net_____

SPONSOR __Group 3, Business Analysis Team_____

----------TO BE COMPLETED BY SYSTEMS PRIORITY BOARD----------

☐	Request approved Assigned to _____ Start Date _____
☐	Recommend revision
☐	Suggest user development
☐	Rejected for reason of _____

Detailed Project Description

Client Information

Bartley Inspections, LLC is a home inspection company run by Erin and his wife Amy Bartley. Erin travels throughout southwest Washington and the Portland metro-area performing high quality home inspections. The company provides a wide variety of services from pest inspections to new construction inspections. Erin became a licensed AHIT home inspector in 2015 after a long career being a contractor and building custom homes. For the last three years, he has continued taking on jobs as a contractor, while also starting his career as a home inspector. With over 30 years' of industry experience, contracting and managing property, Erin has been able to navigate the transition in careers very well, but is now looking to transition fully to focus solely on home inspections.

In the 3 years they have been in operation, they have seen impressive growth resulting in the need for improved report processing, client relationship management, and workflow automation. The current system in place does not allow for easy access to reports, is challenging to back-up often causing the loss of data, has no CRM functionality to track client data, and has no scheduling capabilities to help keep track of upcoming inspections. Based on our initial interviews and analysis, currently in market there are several cloud-based home inspection

software solutions that includes these features and could help Bartley Inspections overcome these current system limitations. With only two employees, Erin manages all appraisals for the company, and Amy performs the bookkeeping and other administrative tasks. For this reason, it is critical that they have efficient technology and processes in place in order for the two of them to manage the new workload.

Services that Bartley Inspections Provides:

- Flexible Scheduling
- Home Maintenance Inspections
- Listing Inspections
- Mold Inspections
- New Construction Inspections
- Onsite Reports
- Radon Testing
- Structural Pest Inspections

Goals and Objectives

Because this highly successful LLC has seen so much growth in recent years, it is becoming increasingly apparent that there is a need for process improvement. Currently Erin splits his time between being a home inspector, and being a contractor. He is splitting time and effort between these two positions and is coming to a point in time where he wants to transition full-time to be a home inspector. In order to support this change, he needs improved process to support a larger workload.

To support this change, our group is proposing the implementation of a new home inspection solution, or a series of applications that can perform the tasks that are currently being done manually, and consuming time that could be spent working with other clients. The core processes that need improvement are report generation and the distribution process. The faster that reports can be reviewed, finalized and sent to the key stakeholders, the faster new inspections can be underway. This process can be streamlined in a way that frees up time and allows Bartley Inspections to more evenly distribute the workflow.

The main objective is to find a way to make reporting process more efficient and give Erin the ability to free some resources that he could the use to complete tasks like advertising and networking, that he currently doesn't have capacity for. The majority of the time that Amy spends editing the reports is after 6pm when he gets home from completing inspections and is able to give her access to his tablet. This is not only an inefficient use of time, but it also is greatly affecting their work life balance. We are working to make Bartley Inspections, Erin's main source of income, and allow him the work life he deserves.

In addition to a new system that contains the features noted above, Bartley Inspections will greatly benefit from the analysis and focus on the current process in place. The system currently in use was sold by the home inspection certification program Erin attended, meaning that he never got the chance to do a proper systems analysis and implementation. He bought the system before he knew what he needed. Our team will help Erin asses the environment and perform the competitive analysis he hasn't had time to complete. This process will help improve his system and potentially allow them the support they needed in order to fully make the transition they have been unable to make up to this point in time.

Problems Statement

Because Bartley Inspections currently only has two employees, the workload has been split between Amy who handles marketing, bookkeeping and client communication and Erin who does all the inspections and reporting. With these resource constraints it is critical that they are utilizing software to support them in automating these processes. Because of the major growth they have seen, the lack of automation, and streamlining of major processes is costing the business time and resources they can't afford wasting. The primary issues the company is currently facing, has to do with three processes: client tracking, scheduling, report creation and distribution. These are all issues that can be automated using separate solutions, or included in one, improved home inspection software application.

As discussed above, Erin purchased InspectIt, this home inspection software system currently in use, from the certification program he attended. He purchased this product prior to beginning his business and without the appropriate analysis and business case that would be best practice in purchasing a new system. As a result, his current process isn't meeting his current needs.

Because home inspectors are almost completely reliant on the support of real estate agents for all client referrals, it is critical that inspectors are able to track key metrics regarding which clients come from which real estate agents, and which agents are generating the most business. This helps inform which agents the company should be building strong relationships with. This functionality is critical in all marketing efforts and is currently not being tracked. Any solution that we find will need to support some of this CRM functionality.

Issues regarding the creation and distribution of reports are rooted in constraints of the current report generating software in place. The software currently being used, and described in detail later in this document, is not cloud-based, meaning for editing and sharing reports, employees need to have the physical device where the application is located. The application used is called InspectIt and is thoroughly analyzed later in this document. InspectIt has been downloaded onto Erin's Samsung Tablet model number CE0168 purchased in 2011. Inspect IT is an application purchased by the company for a one-time fee of $1,200. This purchase allowed the application to be downloaded on two devices and requires an annual maintenance fee. Amy currently does not have access to this device making the process of accessing, editing and distributing reports challenging. They purchased This has several negative implications. The first is data security, if Erin was to lose his device, or damage his hardware, then all of his data would be lost or stolen. The second, is that there is no way for Amy to edit reports until she physically is able to retrieve the tablet from Erin. This sets the inspection process back significantly if Erin is out in the field building reports because Amy cannot begin the editing process until the next day or night when she has access to the physical device.

Lastly, Erin's schedule is being managed on the calendar application on his phone which has proved to be a challenging and manual way to track inspections. With a new software that has the ability to automatically list which inspections are when, could greatly improve his ability to schedule and reduce input error.

Client Constraints

In an initial interview with the company, Erin expressed his concern with learning a new technology, and voiced the struggle that it was learning how to operate and manage the current software InspectIt. This has been an important constraint that our team is operating under and has influenced our research into potential solutions for Erin. Our team will not only ensure the

process and system recommended will be within Erin's current technical ability to operate, but we will also provide a plan and training materials to ensure his success in implementation.

Another constraint our team is under is price. The prices for the system needs to stay within the budget of $1,000-1,500 annually. In our research we will ensure all suggested solutions are within this budget constraint.

Technology Summary

Home Inspecting is a large industry with a wide variety of software solutions that help support the report generation process. In order to determine which solution is right for Erin, it will take further research into industry standards, feasibilities and solutions currently in market. Below we have completed an analysis of two new software solutions, Spectora and Home Inspector Pro. We have also provided a comparative analysis of InspectIt, the current solution in place to analyze where similarities and differences exists between the solutions.

Spectora

Summary

Bartley Home Inspections current solution, InspectIt, has been having multiple issues with job scheduling, job tracking, reports, and cloud sync and data storage. One solution that is being explored is Spectora Home Inspection Software. Spectora is one of the leading home inspection solutions and is available for Windows, Mac, and mobile platforms like phones and tablets. Spectora checks all the requirements as it has reliable and easy to use cloud solution that syncs with a variety of 3rd party apps to help track and prepare future or past jobs. For example, sync Spectora with your Google Calendar and google maps to estimate drive times and properly space your schedule. You can also use google Streetview and Zillow to see what the house looks like, get square footage and other relevant information before even arriving on site for accurate quote estimations. The mobile app does not require WIFI or cellular data for usage, so battery life can be saved for long jobs outside main cell service.

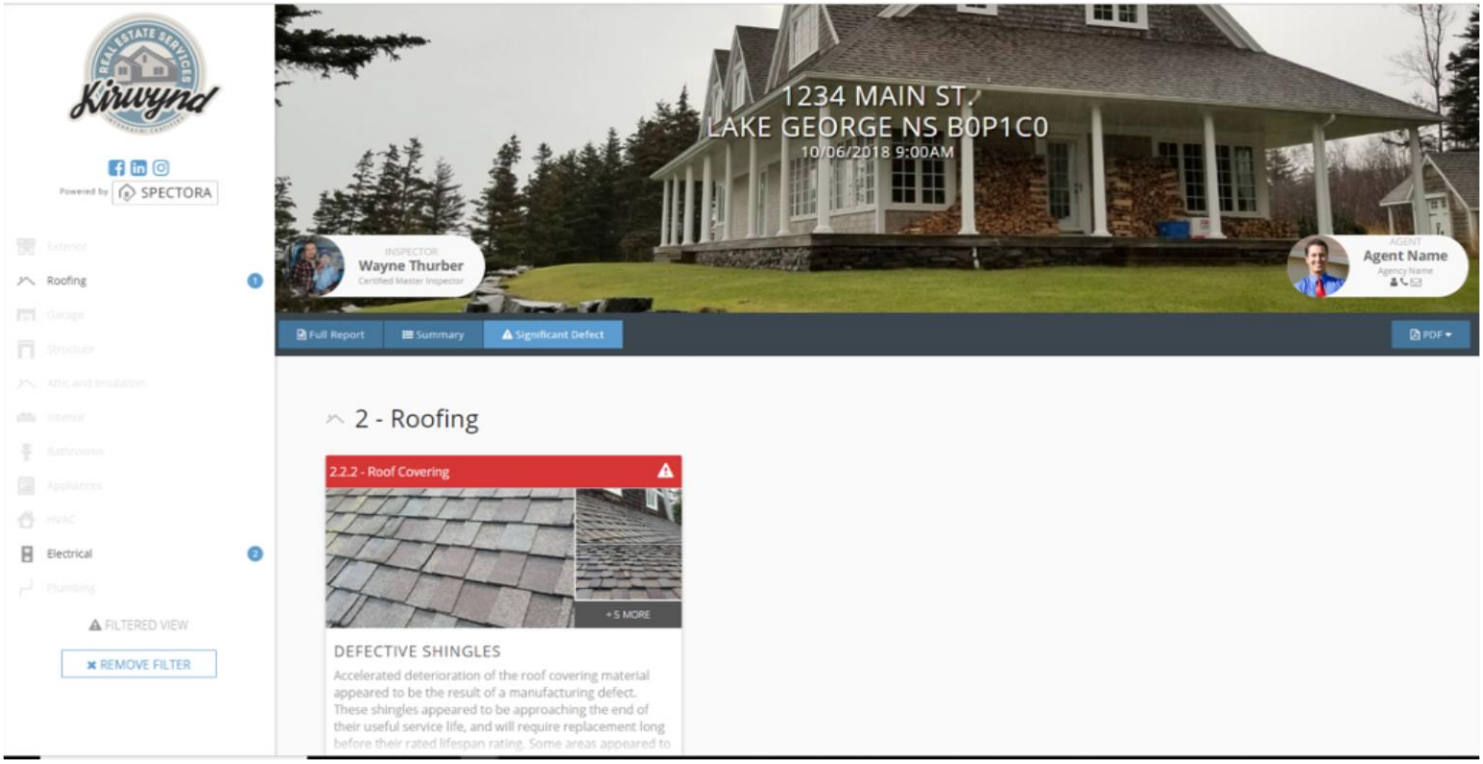
The product is one of the best on the market and is priced along with other top products at $1000 dollars annually. This is priced about equally with our other suggestion, Home Inspector Pro. It is much more expensive than the current InspectIt that is currently in use however,

Spectora and Home Inspector Pro are both marketed as more of a premium, top of the line product while InspectIt is more of a normal good that simply gets the job done.

Suggested is the basic package which does not include website hosting and marketing. The benefit of Spectora however, is that if the business grows, it has a huge potential for business expansion with website hosting, pay-per-click ad campaigns, and other business growing support. If Bartley sees business expansion as an option in the near future, Spectora would be good to get into now and can easily revaluate Spectora at that point and expand to the bigger parts of Spectora or pivot to a new product or use a different company to handle their marketing and website.

Spectora has a wide variety of videos on YouTube that can teach you how to get from zero to Spectora master. This can quickly ramp up new users like Bartley Inc. to decrease the amount of time it would take for templates, automation, and other features to be implemented and use to its needed effectiveness. This serves as excellent technical documentation and best practices for Spectora application use.

Sample Report Screenshot



Screenshot of Spectora using a Significant Defect filter. This filter shows only things that are deemed a significant defect by the inspector. In this case, there are 2 as seen on the left side of the shot.

Features

- Ability to take and edit photos from the app
- Reliable cloud sync
- Can use with or without data/Wi-Fi
- Prepopulated templates are available or make your own.
- Built in automation features
- Sync with things like Zillow, Calendar, and Google Streetview
- Can easily be extended to reach into marketing and website creation
- Plethora of YouTube videos and help guides as well as good customer support.
- Great aesthetics and simple UI filters.
- 7 days a week support

Potential issues

- Setting up the automation, application syncs, and other long-term savers requires a ton of short-term investment. Templates from other products can be implemented but InspectIt specifically is not certain to be available for that.
- Premium product asks for a premium cost.

Reviews from the Community

The Good:

"The software is extremely easy to use and looks better than any reporting software on the market. I received a lot of feedback from my clients stating that they love the look and they loved how the photos are integrated in with the report. The customer service and Technical Support is top-notch." - Travis C.

"Great user interface and great list of features expected in today's competitive industry. Unmatched Customer Service!" - Ryan F.

The Bad:

"Some bugs (always quick to address), some desired features still in development." - Ryan F.

Like with anything else it just takes a little time to get it sorted out and set up to how you like it. I feel like the more experience I get with it the smoother it works." - John T.

All reviews came from Capterra reviews. https://www.capterra.com/p/157144/Spectora/

Home Inspector Pro

Summary

There are numerous issues that Erin has encountered with his current software InspectIt, such as the inability to schedule jobs, tracking of upcoming and past jobs, storing of customer information, customer receipt and report generating, and most importantly the lack of a cloud service. An alternative technology solution that we've explored is Home Inspector Pro (HIP), available on Windows, Mac and mobile platforms. HIP boasts a wide variety of features from fast and flexible cloud-based services to exceptional 24/7 customer service and tech support nationwide. This software gives the user the option to create and customize his or her own inspection template or choose a template provided by the application. Notable features include real time report creation and editing on site, cloud services that allow the user to sync any generated reports with their mobile and desktop platforms, a scheduling interface that contains the client's information with the work that's been done for them and lastly the option to host Erin's personally created website through HIP. These features would not only allow Erin to overcome obstacles as a result of using InspectIt, but would act as a great starting point to increase productivity and efficiency by greatly reducing the time taken to perform the tasks Erin and Amy need to continue operations. While on the phone with Erin, he mentioned wanting to expand his marketing opportunities from word of mouth to online and social media marketing. HIP hosted websites send the client to the customized website the inspector creates to retrieve their report, further expanding his network for online marketing. If Erin decides to create his own website through HIP, there are many pre-made easy to use templates available as well as many instructional videos for guidance.

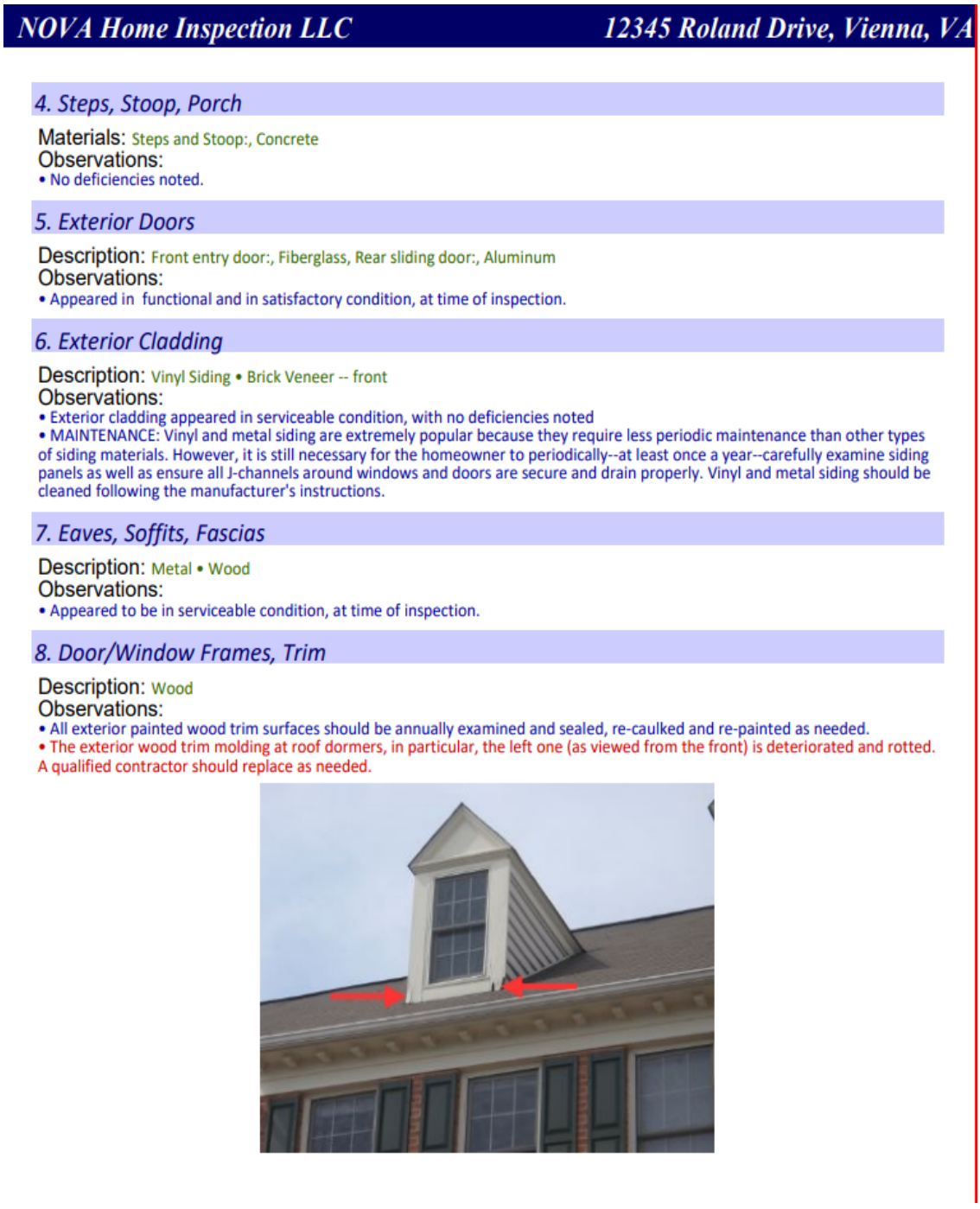
Learning the basic functions and navigation of this interface will take some time, but once familiarized, the software will allow the Erin and Amy to take advantage of multiple opportunities for expansion as a result of reducing the time needed for reporting. Additional features include a portal for real estate agents to access all of the reports Erin has previously completed for them, the ability to insert videos and photos with annotation to reports for easy conveyance of info, a listing of all inspections the inspector has done and when the inspection was performed, listing of the agents and the clients who were involved with the inspection, generation of Department of Energy and Home Energy scores, an automatically generated

emailed sent to clients and agents with a link to the inspection report and an abundance of online tutorial classes. We understand that Erin has a difficult time learning how to use new software, but HIP is known for their very helpful tech support and informational videos that would be a great source of information to overcome any obstacles that may arise while using HIP.

Much like Spectora, this software is above many other products available for the Home Inspection Industry. Regarding product packages and pricing, HIP offers a variety of packages with different price points and payment methods. All features listed above are included in any package purchased, with the option for mobile functionality differentiating the two-tiered packages. Cloud services are also a separate purchase, with the option to pay $20 a month or $240 for a year plan. The basic Tier 1 package starts at $650 and can be paid in full six months after purchase or is available for lease with a down payment of $100 followed by monthly payments of $50. The Tier 2 package starts at $800 and includes the mobile use functionality. The Tier 2 package can be paid in full after six months or is available for lease with a down payment of $125 followed by monthly payments of $65. Furthermore, HIP offers personalized website hosting for Inspectors with a $0 startup fee and $25 monthly hosting fee. All packages and options available are sum up to be within Erin's budget of $1500.

Many professionals recommend this product for entry to mid- level inspectors looking to enhance their efficiency, marketing and productivity. Considering the lack of almost every feature InspectIt has compared to HIP, implementing a well-rounded software packed full of features such as this would be extremely beneficial both short and long term.

Sample Report Screenshot:



NOVA Home Inspection LLC 12345 Roland Drive, Vienna, VA

4. Steps, Stoop, Porch

Materials: Steps and Stoop:, Concrete
Observations:
• No deficiencies noted.

5. Exterior Doors

Description: Front entry door:, Fiberglass, Rear sliding door:, Aluminum
Observations:
• Appeared in functional and in satisfactory condition, at time of inspection.

6. Exterior Cladding

Description: Vinyl Siding • Brick Veneer -- front
Observations:
• Exterior cladding appeared in serviceable condition, with no deficiencies noted
• MAINTENANCE: Vinyl and metal siding are extremely popular because they require less periodic maintenance than other types of siding materials. However, it is still necessary for the homeowner to periodically--at least once a year--carefully examine siding panels as well as ensure all J-channels around windows and doors are secure and drain properly. Vinyl and metal siding should be cleaned following the manufacturer's instructions.

7. Eaves, Soffits, Fascias

Description: Metal • Wood
Observations:
• Appeared to be in serviceable condition, at time of inspection.

8. Door/Window Frames, Trim

Description: Wood
Observations:
• All exterior painted wood trim surfaces should be annually examined and sealed, re-caulked and re-painted as needed.
• The exterior wood trim molding at roof dormers, in particular, the left one (as viewed from the front) is deteriorated and rotted. A qualified contractor should replace as needed.

Home Inspector Pro exports to PDF easily. Here is a screenshot show casing the photo integration and photo editing. The format is clean and organized.

Features

- Able to insert videos and photos with annotation to reports
- Generates easy to read reports for buyers, sellers and real estate agents
- Sync all data to and from the Home Inspector Pro (HIP) Cloud
- Real estate agents can log into their account and view ALL inspections you have ever done for them
- You are shown a listing of all inspections you have done, who the agent and the client was, and when you performed it.
- Comes with HIP desktop and mobile tutorial classes

Potential Problems

- Requires a lot of time to setup basic features and customize reports and templates
- Interface aesthetics are lacking; clunky fonts, important pages don't stand out for the eye

InspectIt Home Inspections

Summary

InspectIt is the incumbent. Based out of Microsoft Word its limitations are expansive as far as flexibility. The product is reviewed as easy to use but they sacrifice depth for simplicity. Only recently have they moved to a cloud-based platform (backtracking from their plan of revoking support for mobile applications in 2006) and the results have been uninspiring based on community feedback.

InspectIt is a dated product. The last time it received an update, according to its support page, was early 2008. This lack of development and support shows that it should not be a long-term solution as, eventually, it would be reasonable to assume that it will be deprecated entirely and finding a new solution will be required then.

InspectIt + cloud software costs a $50 per month (or 600 a year). This makes it about $400 cheaper than our other solutions. It would be more expensive if InspectIt was to be newly implemented as it is $800 for the initial purchase. Since the base application has already been purchased, it will only cost the fee of upgrading to the cloud product.

Exterior

DESCRIPTION OF EXTERIOR

Wall Covering:	•Wood Siding
Eaves, Soffits, And Fascias:	•Wood
Exterior Doors:	•Solid Wood
Window/Door Frames and Trim:	•Wood
Entry Driveways:	•Gravel
Entry Walkways And Patios:	•Brick
Porches, Decks, Steps, Railings:	•Wood
Overhead Garage Door(s):	•Wood •Automatic Opener Installed
Surface Drainage:	•Level Grade •Graded Away From House
Retaining Walls:	•Stone
Fencing:	•None

EXTERIOR OBSERVATIONS

General Comments

The exteriors of the home and garage have lacked maintenance. Repairs are needed.

RECOMMENDATIONS / OBSERVATIONS

Exteriors

- **Repair:** Wood rot and deterioration was observed in multiple areas of the exterior, and should be repaired as needed by a qualified contractor. Locations include, but are not limited to, the exterior siding and trim, windows, porches including decking and railings, the bases of the support columns for the gazebo, and rafter tails on the right rear corner of garage. See photos on page 9.

LIMITATIONS OF EXTERIOR INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- A representative sample of exterior components was inspected rather than every occurrence of components.
- The inspection does not include an assessment of geological, geotechnical, or hydrological conditions, or environmental hazards.
- Screening, shutters, awnings, or similar seasonal accessories, fences, recreational facilities, outbuildings, seawalls, break-walls, docks, erosion control and earth stabilization measures are not inspected unless specifically agreed-upon and documented in this report.

Screenshot of a section of the InspectIt. Clean and clear organization.

Features

- Add and edit photos in app
- Edit reports in Microsoft Word
- A calendar to view and schedule inspections
- Generate and email PDF reports from the app.

Potential Problems

- Little to no product development in more than 10 years
- No filter options like other products

Words from the Community

The Good:

"Easy to use as far as inputting information for reports that's about all the positive I have to say about this software." - Megan M

"*Easy to navigate, add pictures (mark ups) easy to generate reports. I like the ease of use, however it lacks some major features to allow it to be used in Commercial Inspections and reports."* - Darrel P.

The Bad:

"The software has great potential, very easy to use and gives a great report. Just not versatile if you do commercial as well as residential inspections. Disappointed that no upgrades are even considered." - Darrel P.

"The customer support when you do have issues is terrible. They only work bankers hours and be expected for a software that will not actually fix the issues you have. Loading to the cloud has taken roughly 30 minutes for 2 reports. It is a waste of time to be sitting there. On several occasions the sync would not transfer all my photos. If I were lucky, I would catch it. If not my report went out with a guaranteed call back. There is a Facebook group made by inspectors about this software. Start there before thinking of purchasing." - Donald P.

All reviews were obtained from Capterra.

Project Feasibility

Economic Feasibility

The current budget that Erin would like to stay within when transitioning to a new system would be in the range of $1,000 - $1,500 dollars. Spectora software comes to either $99 dollars per month or an annual charge of $999 dollars. All cost associated with Spectora are included into the monthly fee such as the cloud space. Spectora fits within the allotted budget and even allows room for other improvements such as hardware if desired. Currently our team is not able to demonstrate a cost constraint or breakeven constraint. There are still factors that we cannot take into account to perform a cost/breakeven constraint analysis. We intend on included a demonstration of these constraints in future deliverables once we have accurate data to do so.

Legal and Contractual Feasibility

Erin had informed us that he is legally licensed in the state of Washington and Oregon. The range business Bartley Inspections stays is within the limits of Washington and Oregon State. Legally the new system is permitted to be used as a home inspection software in all 50 states. The legal agreement and terms of use is a legally binding contract between Spectora, Inc. and the user which in this case will be Erin of Bartley Inspections, LLC. Spectora is solely a tool that is offered for home inspections but does not guarantee the outcome, results, or completeness of reports as stated in the term of use on the Spectora website. The terms of use for Spectora are similar to all home inspection software's where the home inspector themselves are responsible for all outcomes of their work. Erin currently holds his own contract that states he is not liable for any faults that occur to the home after his inspection has been made. There are currently no contractual obligations to the current system that is in place so there will be no breach of contract when Erin integrates Spectora as the new system for Bartley Inspections.

Operational Feasibility

Spectora meets all the current needs that we are seeking to achieve by implementing a new system for Bartley Inspections. Erin and Amy will find that Spectora offers many time saving features that the current system does not offer. For operational feasibility we focused on the ease of use. Transitioning from the old system to Spectora will not require rigorous training and can be used by non-technical staff. The interface and system structure can be easily self-guided and receives frequent updates. The May 2018 update implemented new templates for

creating a clean and easy to navigate reports. This will help Amy create reports after Erin has completed inspections. Spectora uses the data that Erin would input during an inspection and generates a report which then can be edited and adjusted. There is also a feature that allows the user to set a default template so that each report is automatically formatted. These new features will save time by eliminating the current issue of having to re-enter the data of the inspection into a document and create a new template for each report. Spectora's interface is made for users of all technological abilities and has implemented many time saving features. This system will benefit the employees in all aspects for Bartley Inspections.

Technical Feasibility

After speaking with Erin, he raised a concern of the difficulty of implementing a new system. In his career in Home Inspections, he has only ever used the current system that was in place. The concern was that the new system would be too difficult to adjust to and that he would have to change his current operations for his inspections. Coming from a strictly technical perspective, to acquire the new system would be simple since Spectora can be downloaded on his current tablet. Erin is already familiar with his tablet and it will require no new hardware. From a technical perspective the use of Spectora may even be easier than his current system. The current system has no cloud base abilities and all information is stored on the physical tablet itself. If there was any accident or damage to the tablet, all data would be lost permanently. With Spectora, there a is large user community, customer support, newsletters, training videos, unlimited cloud storage, and many more features that not only benefit Erin as the user but Bartley Inspections as a company. The transition will be well supported and easy to follow as there are constant updates to improve the Spectora app, whereas the current system in place has not been improved or updated since Erin purchased the system three years prior. From the technical perspective in term of managing Spectora, there features Spectora offers that surpass what the current system has in place. Especially when managing payments, the current system does not allow payment options or the ability to store payment information. Spectora has integrated payments and invoices which will help Erin keep track of his sales and link payments to specific account. Spectora can also track all clients and previous inspections and preform business intelligence and metrics options to monitor how Bartley Inspections is performing as a company. Not only will Spectora be easy to manage but Erin will have all his business data in one system that he can always go back and refer to.

Political Feasibility

While looking at the politics of Bartley Inspections, LLC, the stakeholders in this organization are Erin and Amy Bartley. During the interview, we discussed potential solutions to the company's given resource constraints and have provided a general outline of the solution implementation. The conveyed outline included a summary of the project timeline, system analysis, potential costs and system requirements, solution benefits and solution implementation. Considering Erin and Amy are the only stakeholders in the organization, we confirmed that both understand the timeline and what is needed for this project to be a success; both stakeholders are on board with the solution implementation.

Schedule Feasibility

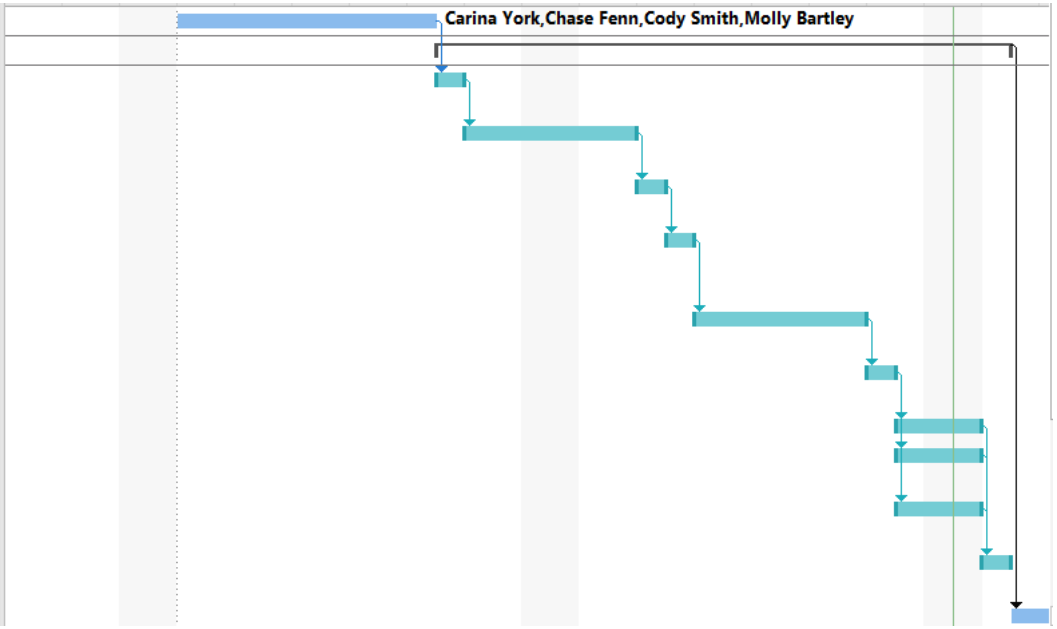
After speaking with Erin about his time constraints, we discussed the best times to implement a solution. Erin's preferred window for implementation is in the Fall and January-February indicating the months with the least amount of business. Implementing such software during the busy season would hinder Erin's capacity to learn the in- and- outs of this software, he would not be able take full advantage of its capabilities. Spectora both imply a learning curve in understanding and navigating the interface, with some inspectors reporting that it takes three weeks to a month and a half to fully personalize the inspectors reporting templates and inspection interfaces. As a result of Spectora's easily accessible instructional videos, we believe that Erin will have enough resources at his finger tips to efficiently overcome this interface learning curve and excel in the use of this software.

Ethical Feasibility

A primary goal as systems analysts is the abiding of Bartley Inspections, LLCs ethics and goals, as well as the Washington Laws and Regulations permitting home inspection. We've looked at numerous software solutions, all which abide by Washington State laws. One important aspect of ethicality that was addressed in the interview was the ability to work on a client's house that Erin had previously inspected. Given the situation that Erin had inspect a home and came across broken items, it would be unethical and illegal to fix those broken items. This would put other inspectors and contractors at an unfair advantage and could have severe negative impact on Erin's reputation, business license and career.

Project Schedule

	Deliverable 1	7 days	Mon 9/17/18	Tue 9/25/18	
	Deliverable 2	**14 days**	**Wed 9/26/18**	**Mon 10/15/18**	
	Group Meeting: Assign team tasks	1 day	Wed 9/26/18	Wed 9/26/18	1
	Detailed Project Description	4 days	Thu 9/27/18	Tue 10/2/18	3
	Client Interview (Phone call)	1 day	Wed 10/3/18	Wed 10/3/18	4
	Group Meeting: Reallocate Assignments	1 day	Thu 10/4/18	Thu 10/4/18	5
	Technology Summary	4 days	Fri 10/5/18	Wed 10/10/18	6
	Group Meeting: Recap and Finish	1 day	Thu 10/11/18	Thu 10/11/18	7
	Feasibility Analysi	2 days	Fri 10/12/18	Sun 10/14/18	8
	System Service Request	2 days	Fri 10/12/18	Sun 10/14/18	8
	Executive Summary	2 days	Fri 10/12/18	Sun 10/14/18	8
	Submit Deliverable 2	1 day	Mon 10/15/18	Mon 10/15/18	11,9,1
	Deliverable 3	26 days	Tue 10/16/18	Tue 11/20/18	2



Timeline Details

In the five weeks since the project Identification Statement was submitted, our team has been deeply immersed in familiarizing ourselves with the home inspection industry standards, regulation and technology associated. In addition, we have interviewed Erin and Amy to get a more in-depth view in to their day to day processes and have gotten valuable insight to direct us through our next deliverable. Lastly, we've established a good idea of the resources needed to conduct business and continue daily operations, as well as the obstacles and constraints Bartley Inspections, LLC faces. In order to keep our project on track and meet current schedule requirements, we are following the timeline listed in the Gantt chart provided later in the document.

Summary of Changes

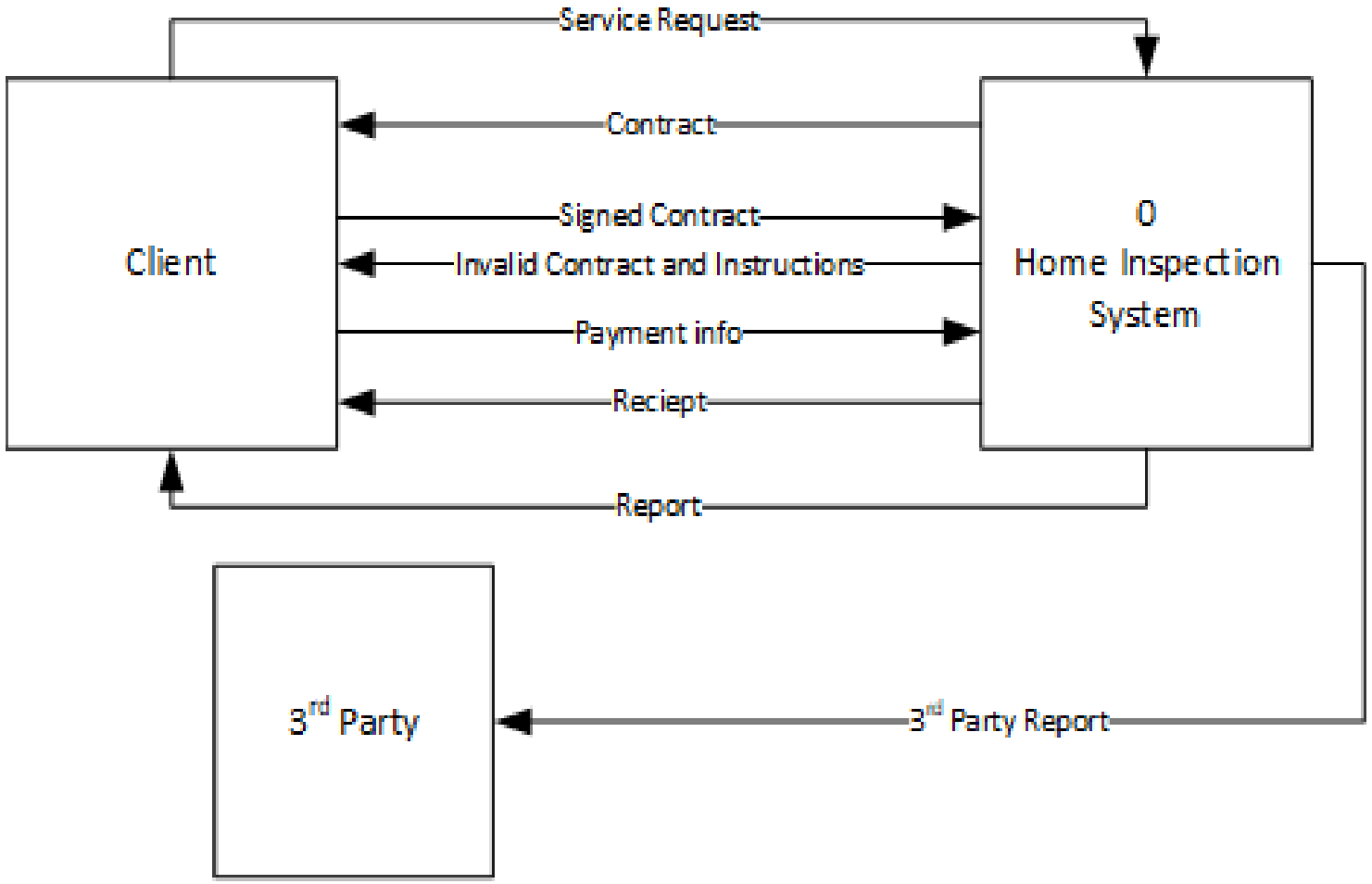
This document summarizes our business operations analysis for Bartley Inspections, LLC. Our team has analyzed the processes of data exchange within the organization to solidify our understanding of internal processes and information handling as well as understand where the system is operating efficiently and where there are areas for improvement. This phase of the project will provide the context that will then allow us to make recommendations and create an implementation plan for a new home inspection software solution.

Since our last deliverable, very few changes to the project plan have occurred. Our team has continued to be in contact with our primary stakeholder, the owner and home inspector, Erin Bartley. We have performed three short interviews with Erin since our last deliverable and these interviews have been focused on getting a detailed overview of how he performs each inspection and how information is exchanged internally and to stakeholders. The first interview provided us with a broad, high-level understanding and then we were able to use the second and third interviews to refine our lower level details and make sure we had made correct assumptions in certain areas. This process was useful in confirming that our initial understanding of the companies processes and procedures, and our prediction and evaluations have been correct, with the exception of a few details.

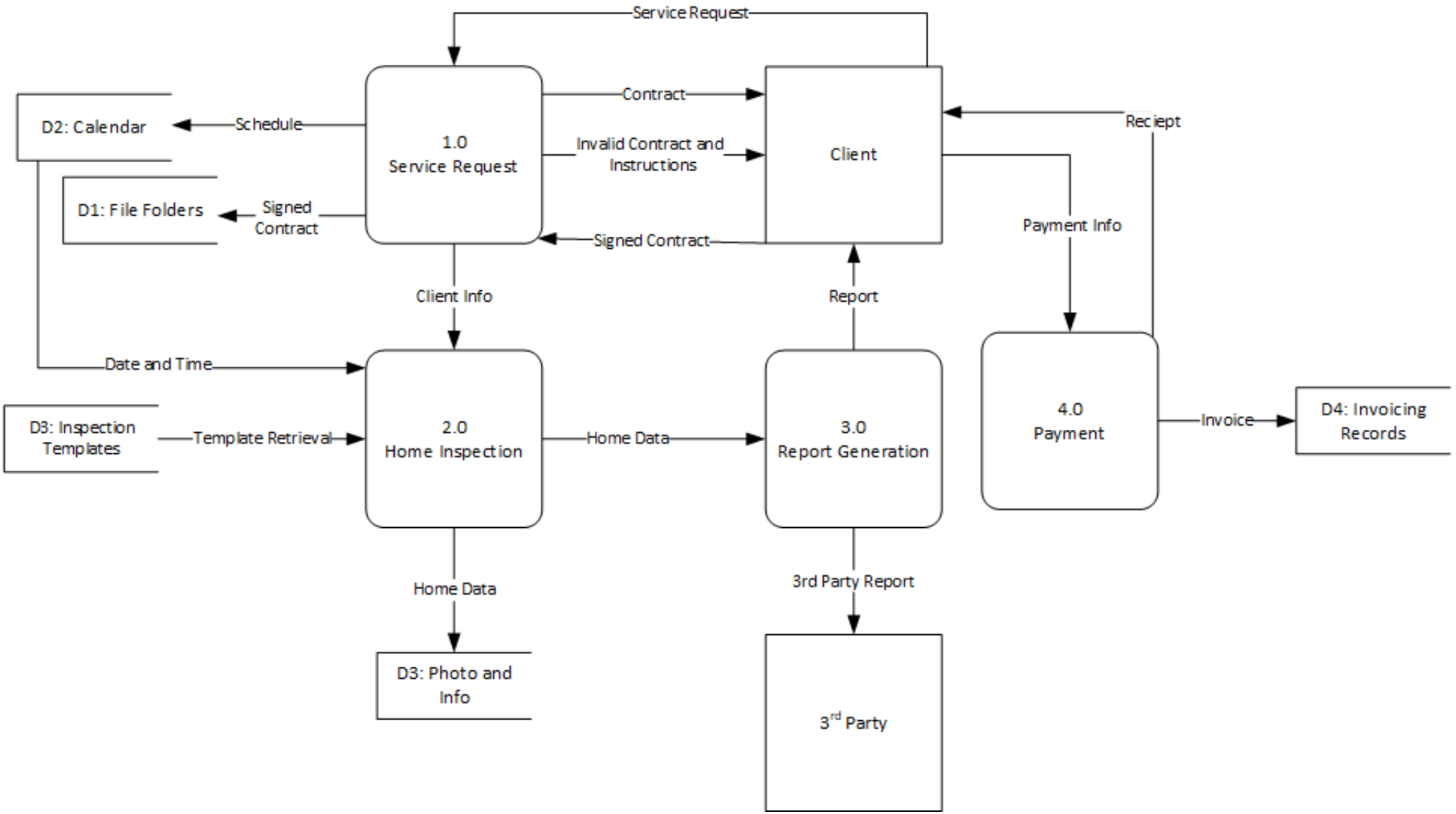
Data Flow Diagrams

In order to logically model the complex processes happening within Bartley Inspections, we have used Data Flow Diagramming. Included below are a series of diagrams that are mapping major processes where data is transformed and exchanged throughout the organization. This will help us better understand where the system can be improved and where there is potential to supplement with a new home inspection software package

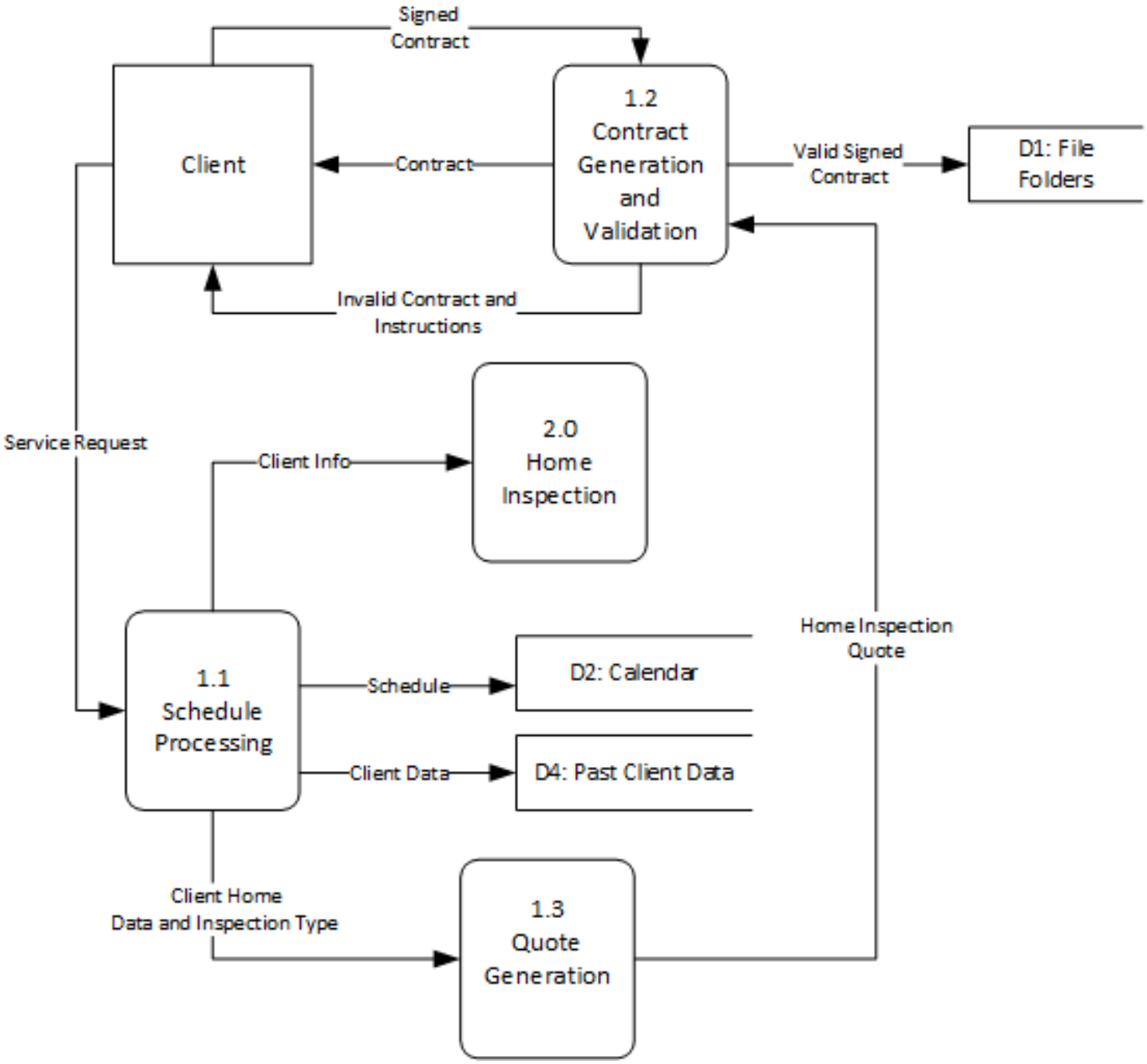
Context Diagram



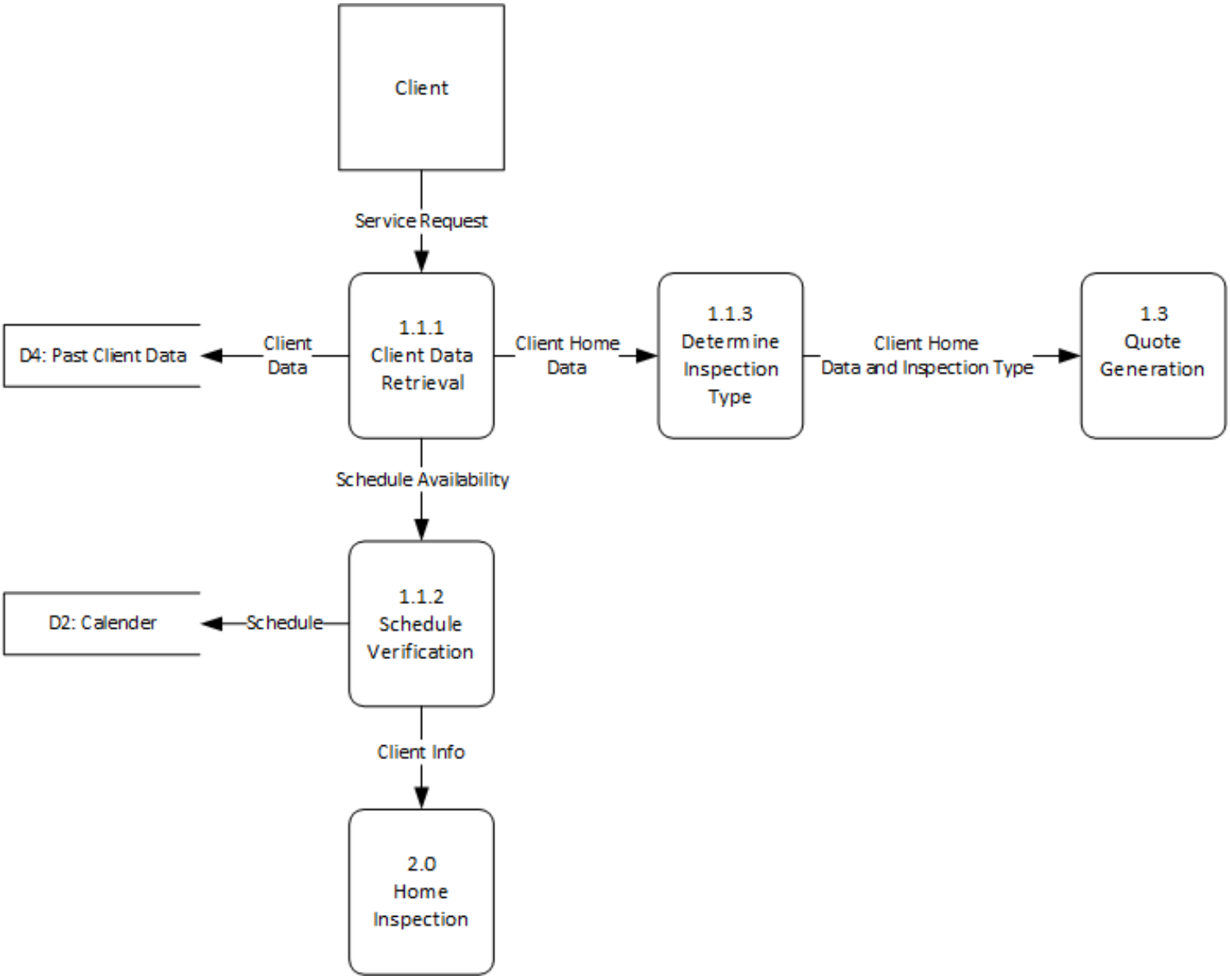
Level-0


Service Request
D2: Calendar
Schedule
1.0
Service Request
Contract
Invalid Contract and
Instructions
Client
Reciept
D1: File Folders
Signed
Contract
Signed Contract
Payment Info
Client Info
Report
Date and Time
D3: Inspection
Templates
Template Retrieval
2.0
Home Inspection
Home Data
3.0
Report Generation
4.0
Payment
Invoice
D4: Invoicing
Records
Home Data
3rd Party Report
D3: Photo and
Info
3rd Party

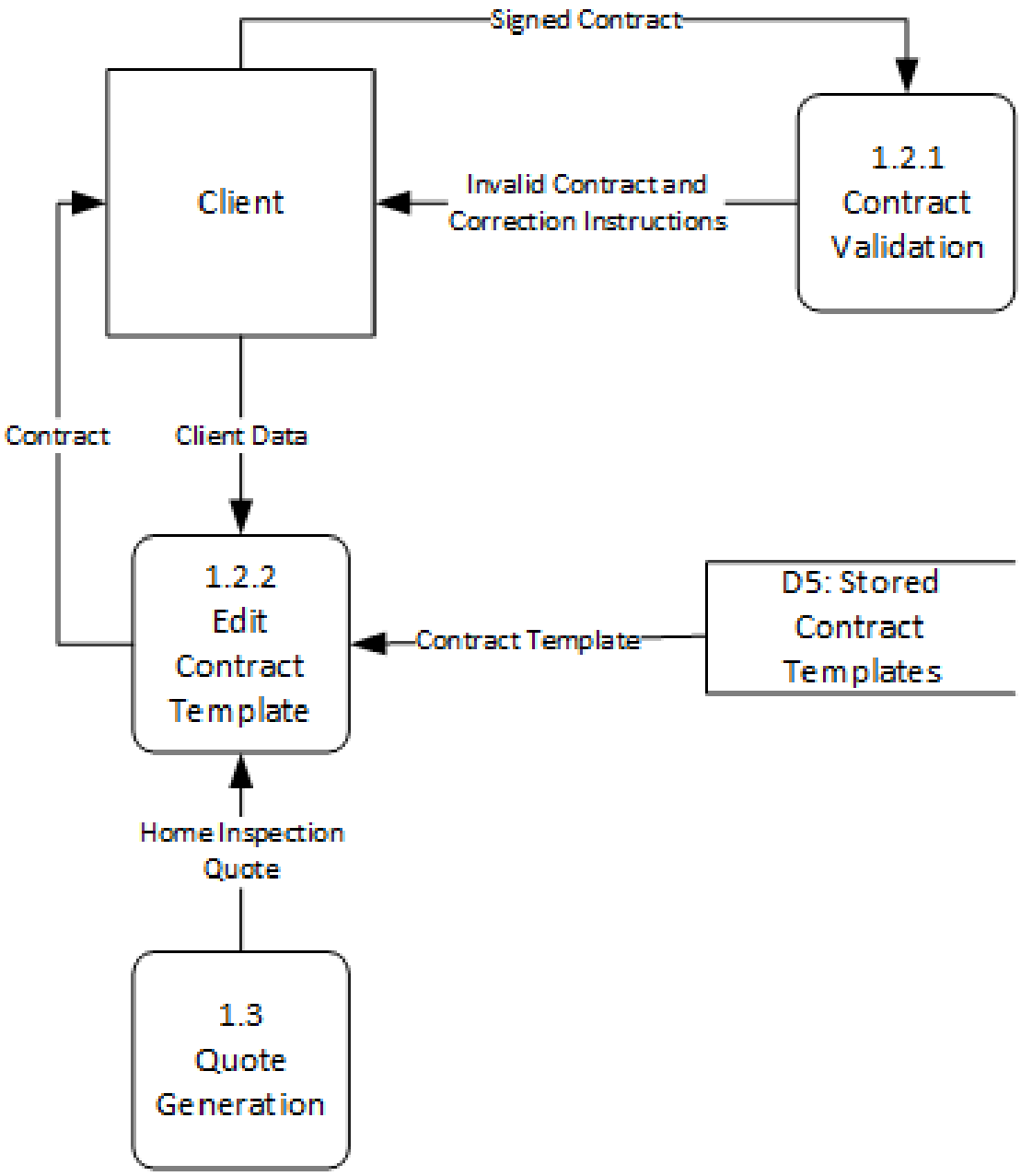
Process 1.0: Service Request



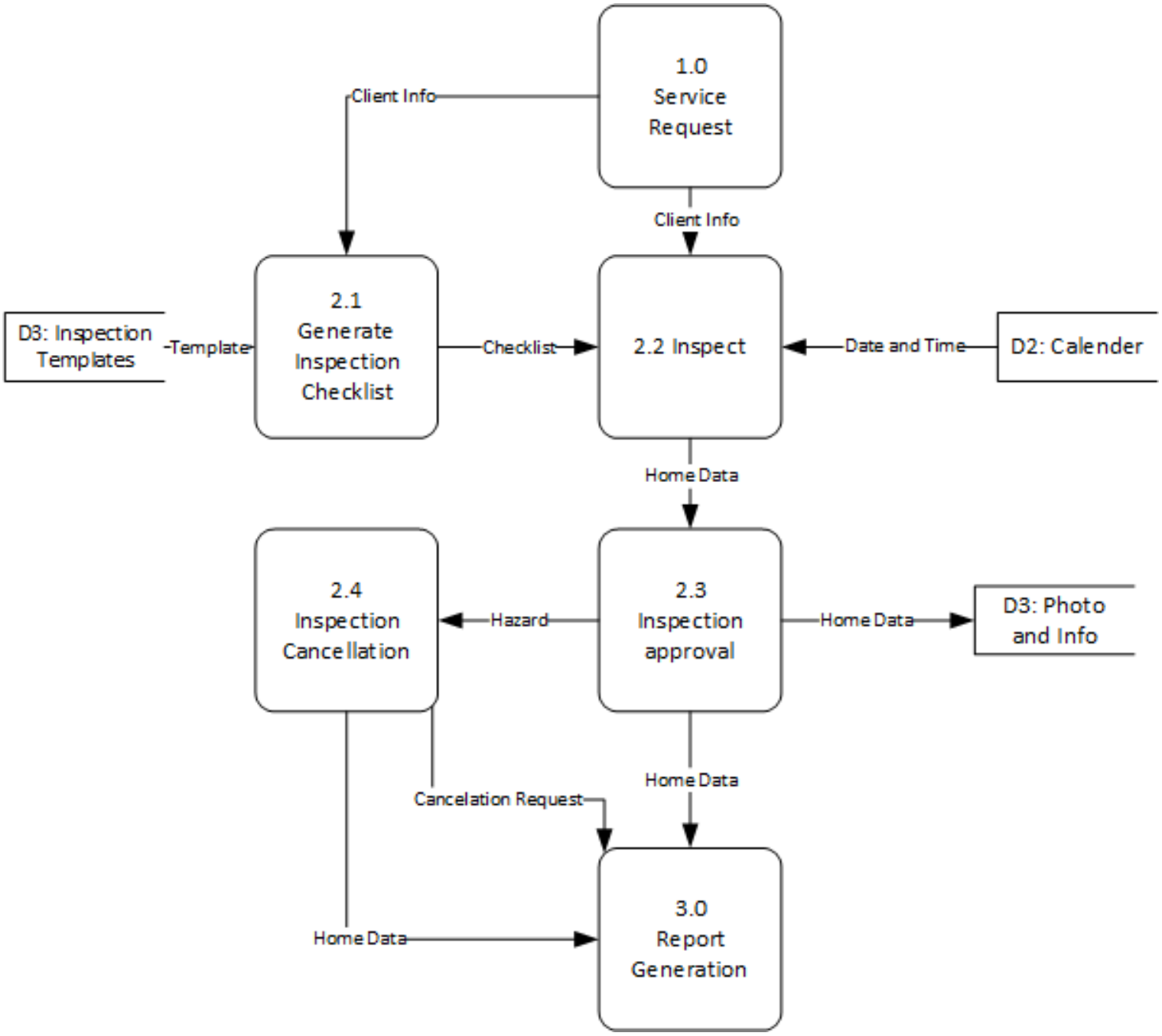
Process 1.1: Schedule Processing



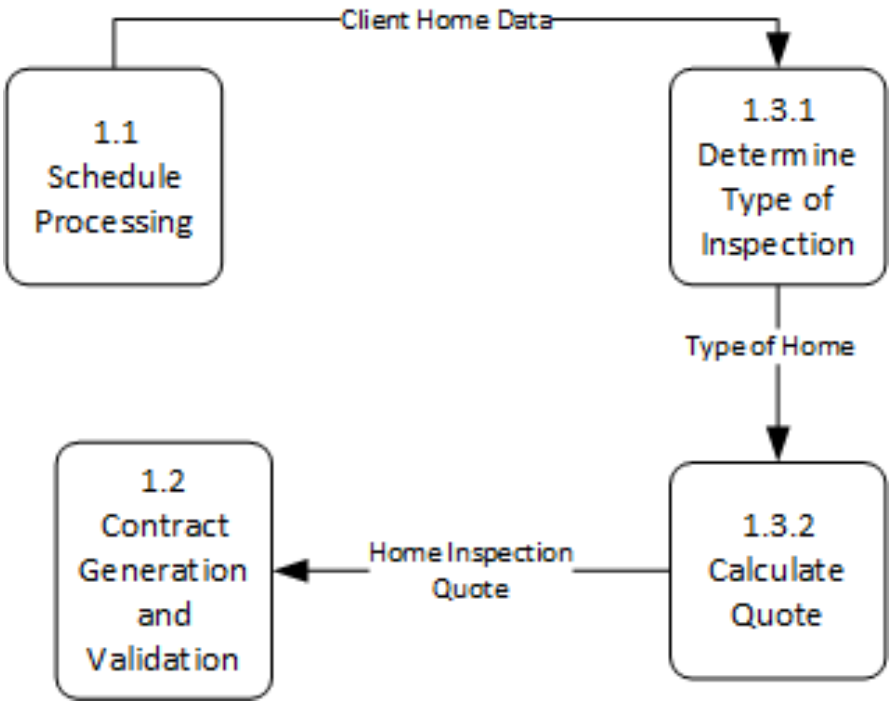
Process 1.2: Contract Generation and Validation



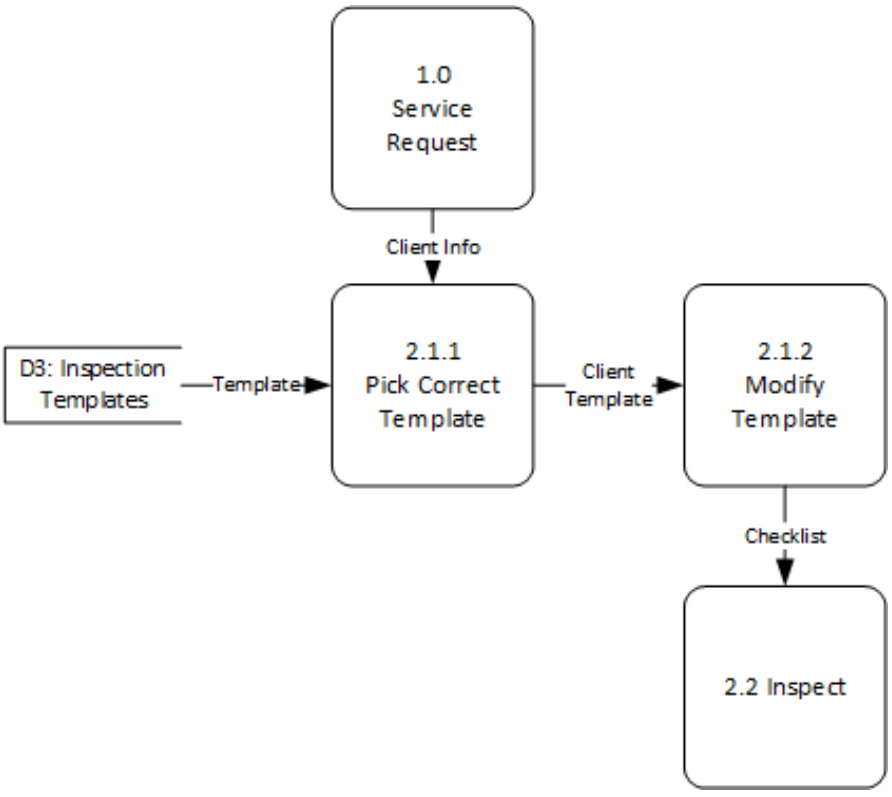
Process 1.3: Quote Generation



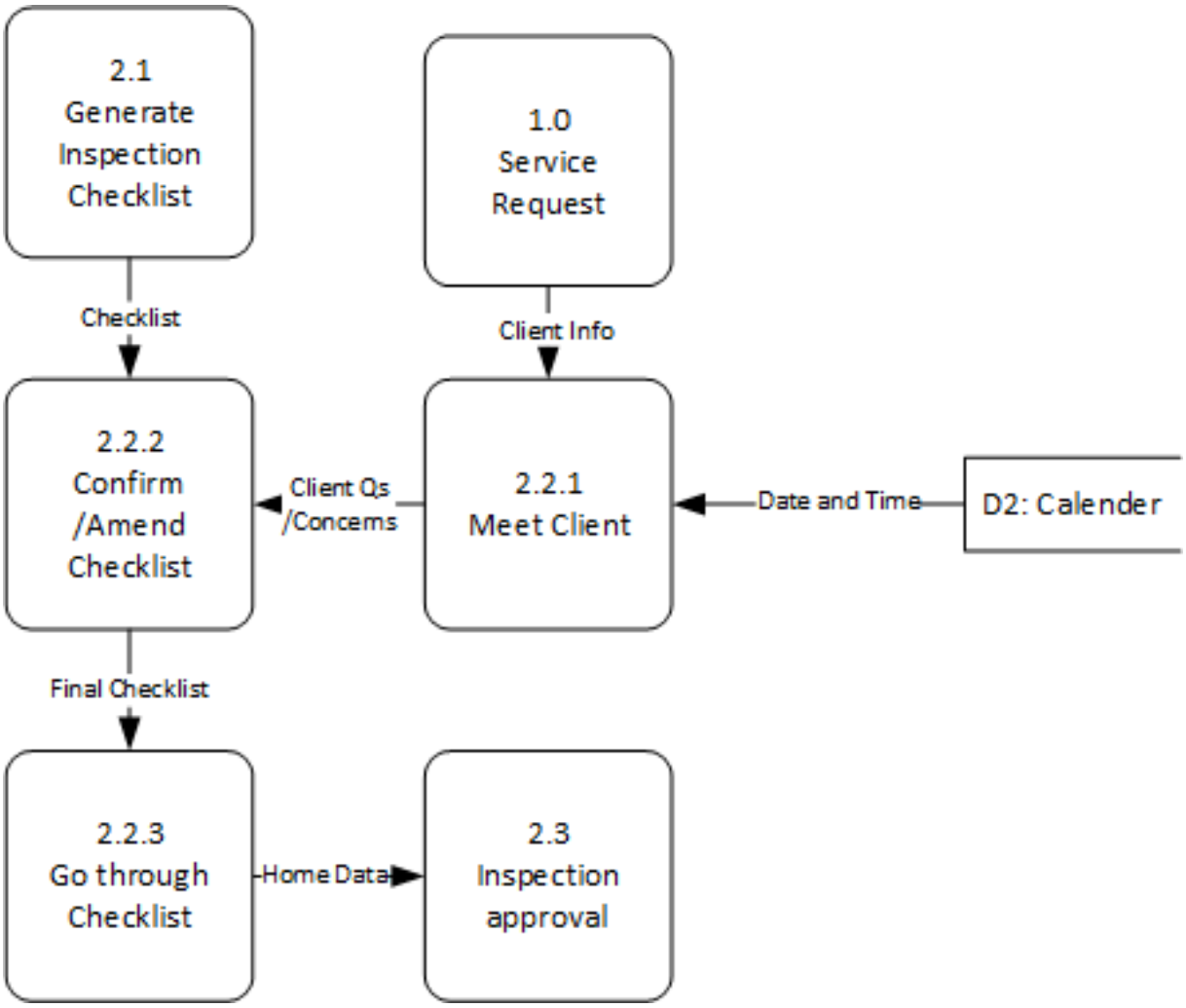
Process 2.0: Home Inspection



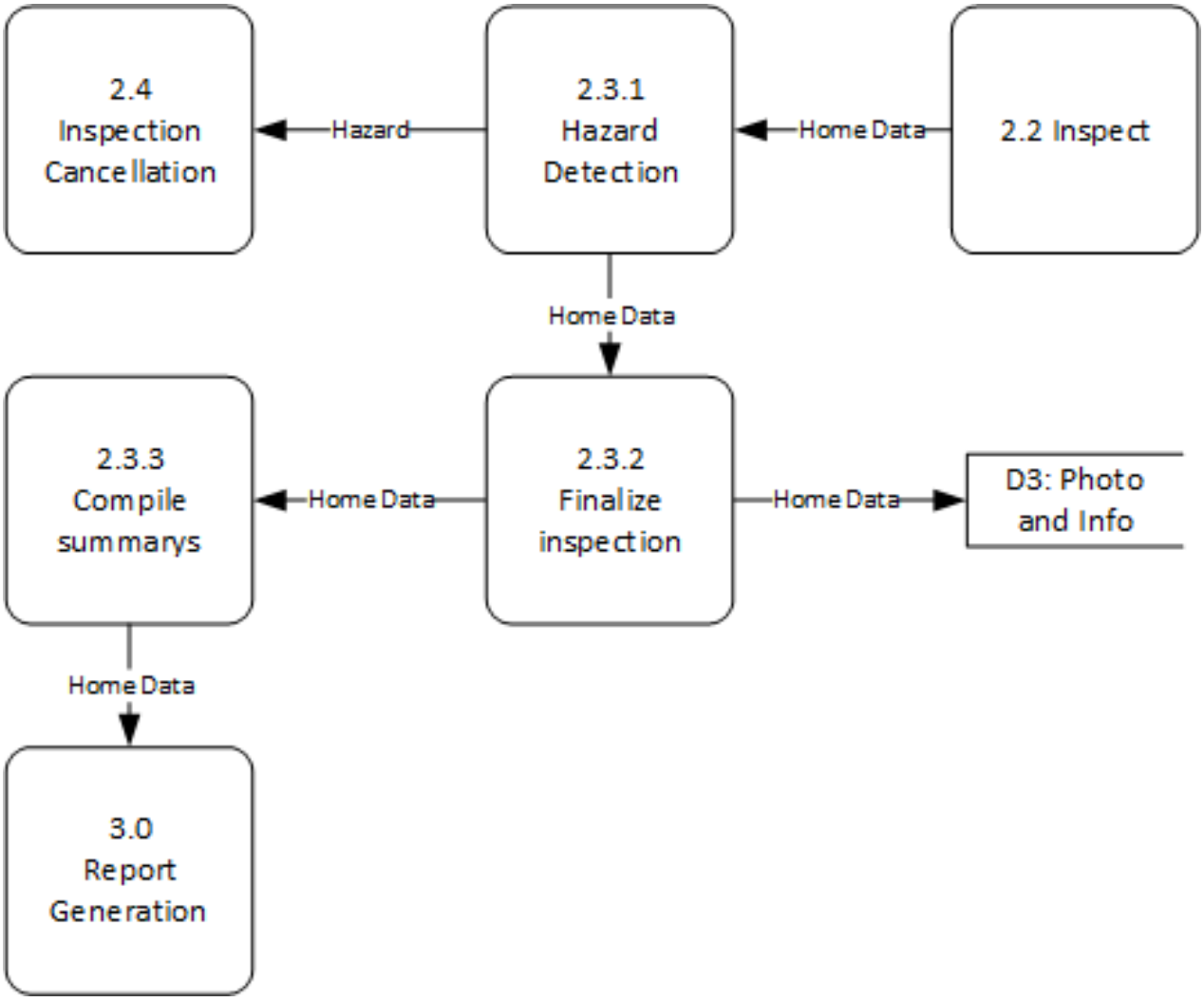
Process 2.1: Generate Inspection Checklist



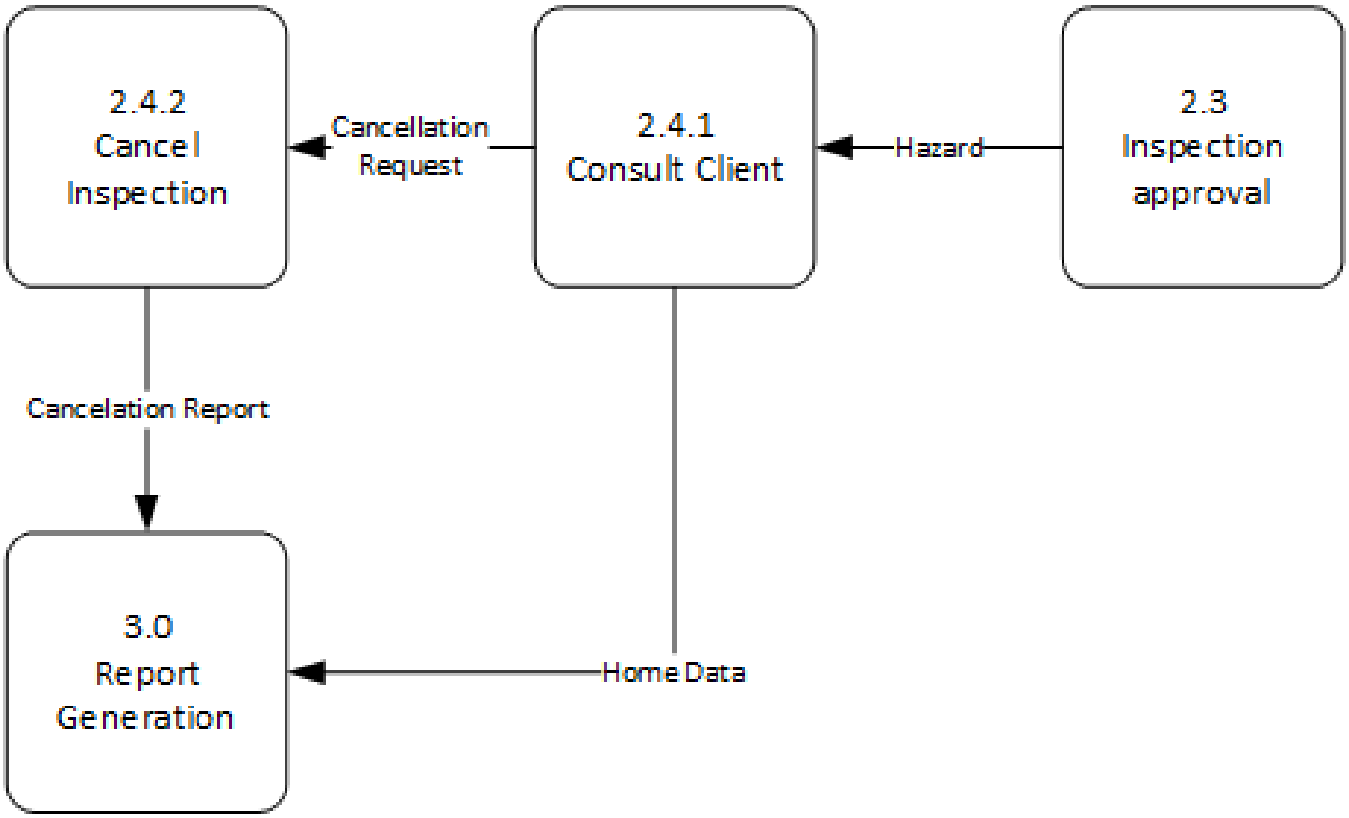
Process 2.2: Inspect



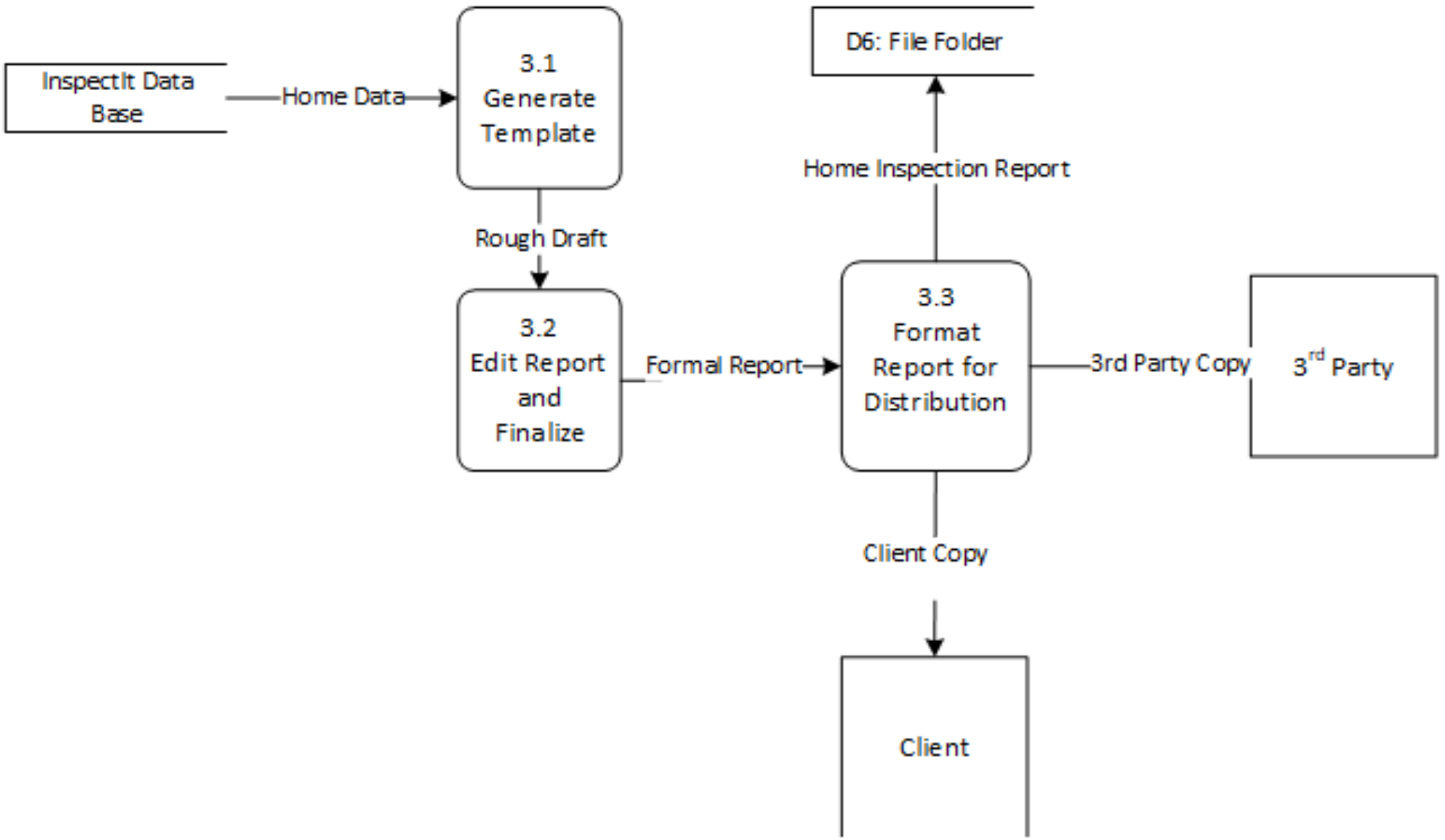
Process 2.3: Inspection Approval



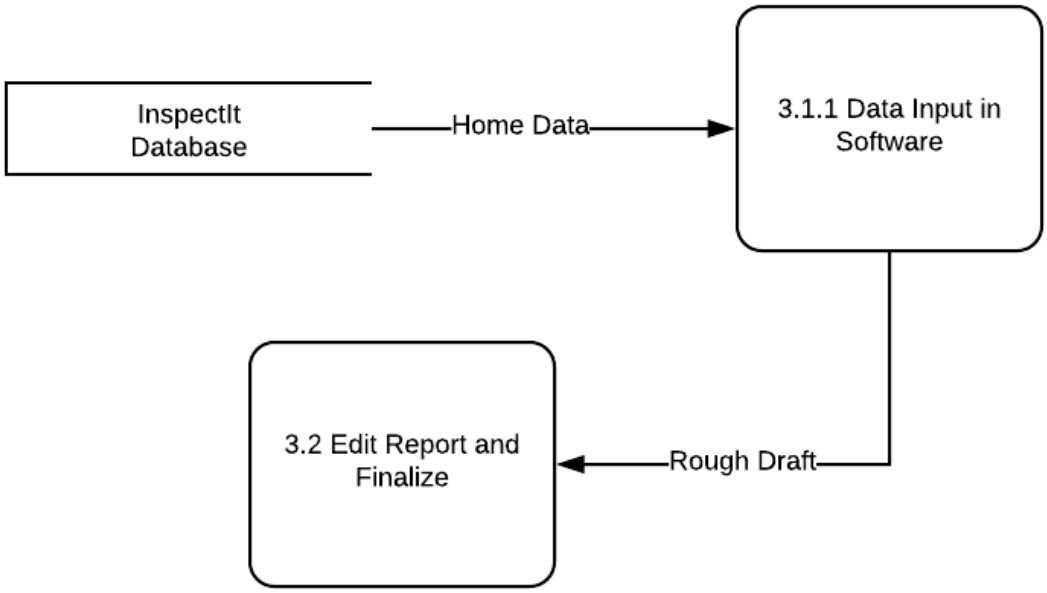
Process 2.4 Inspection Cancelation



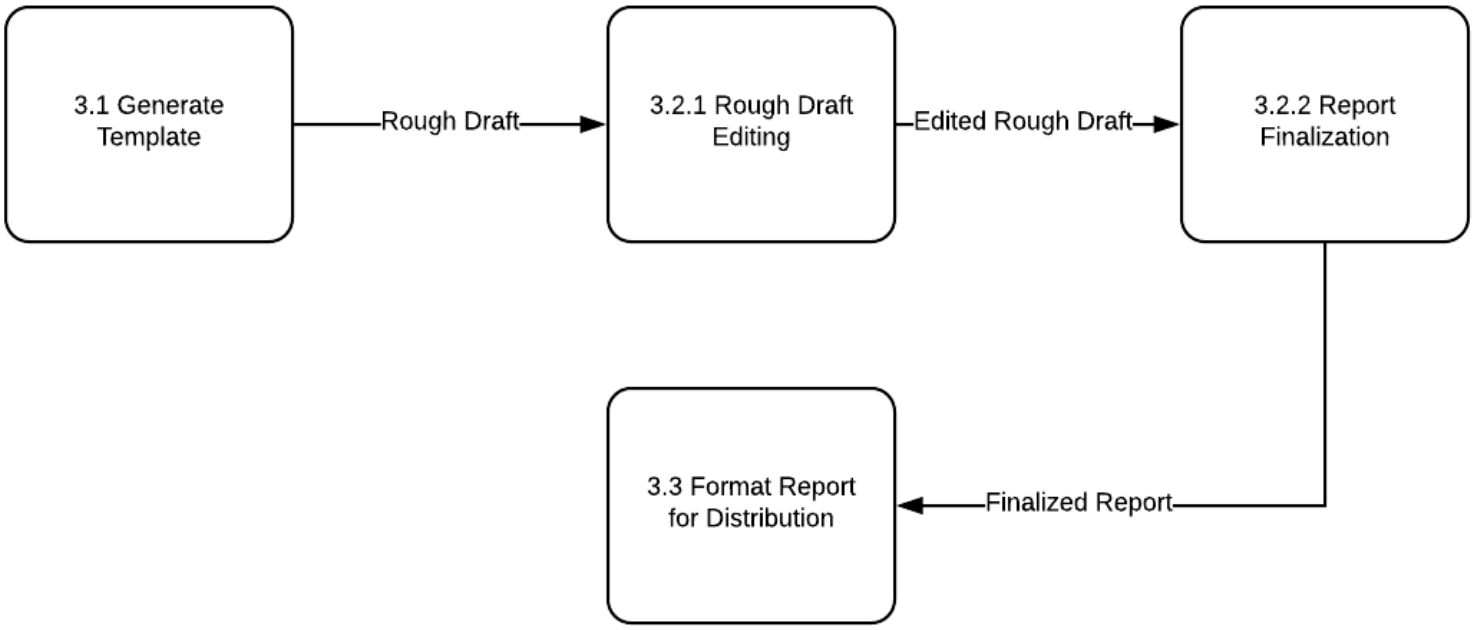
Process 3.0: Report Generation



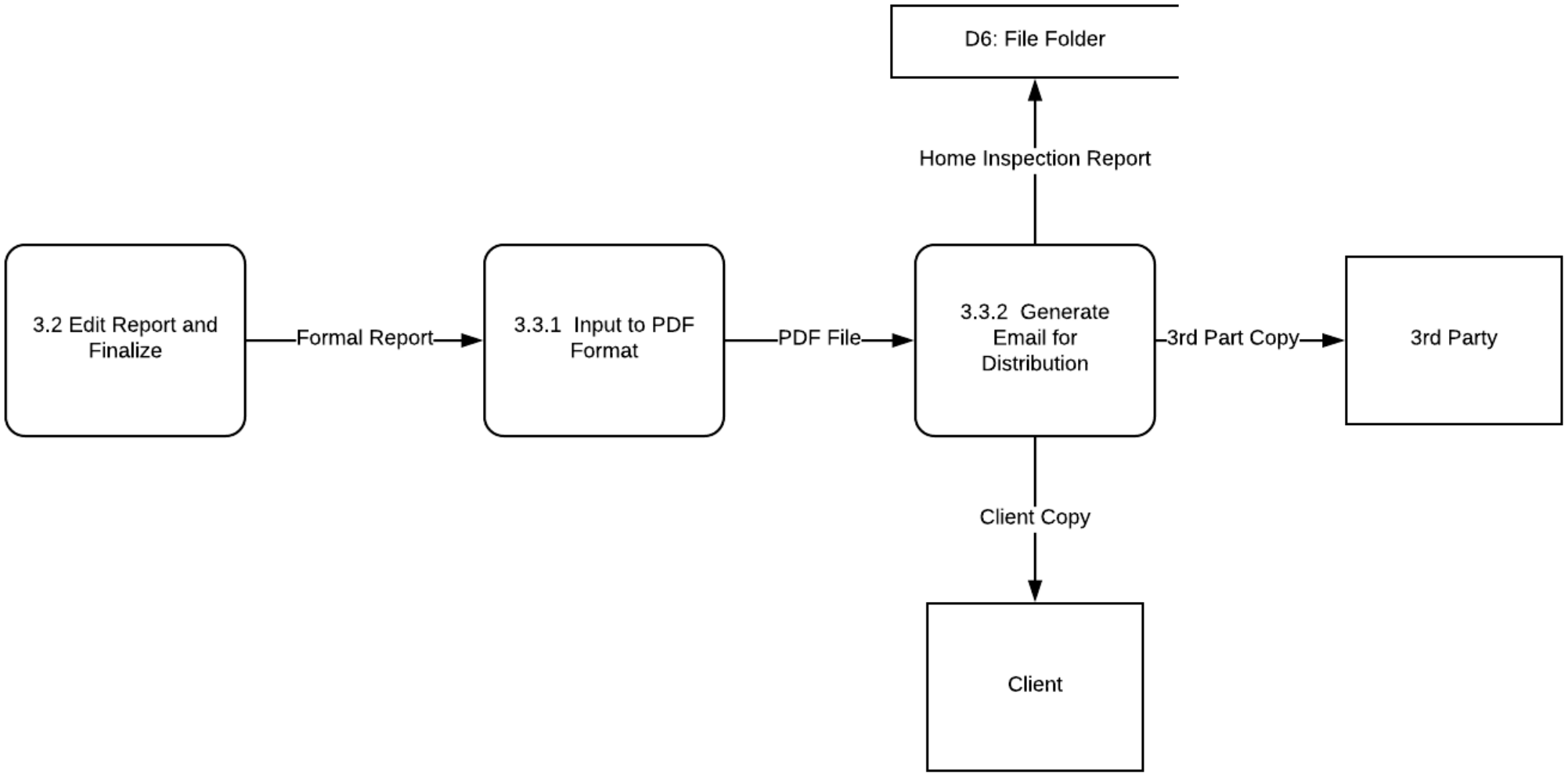
Process 3.1: Generate Template



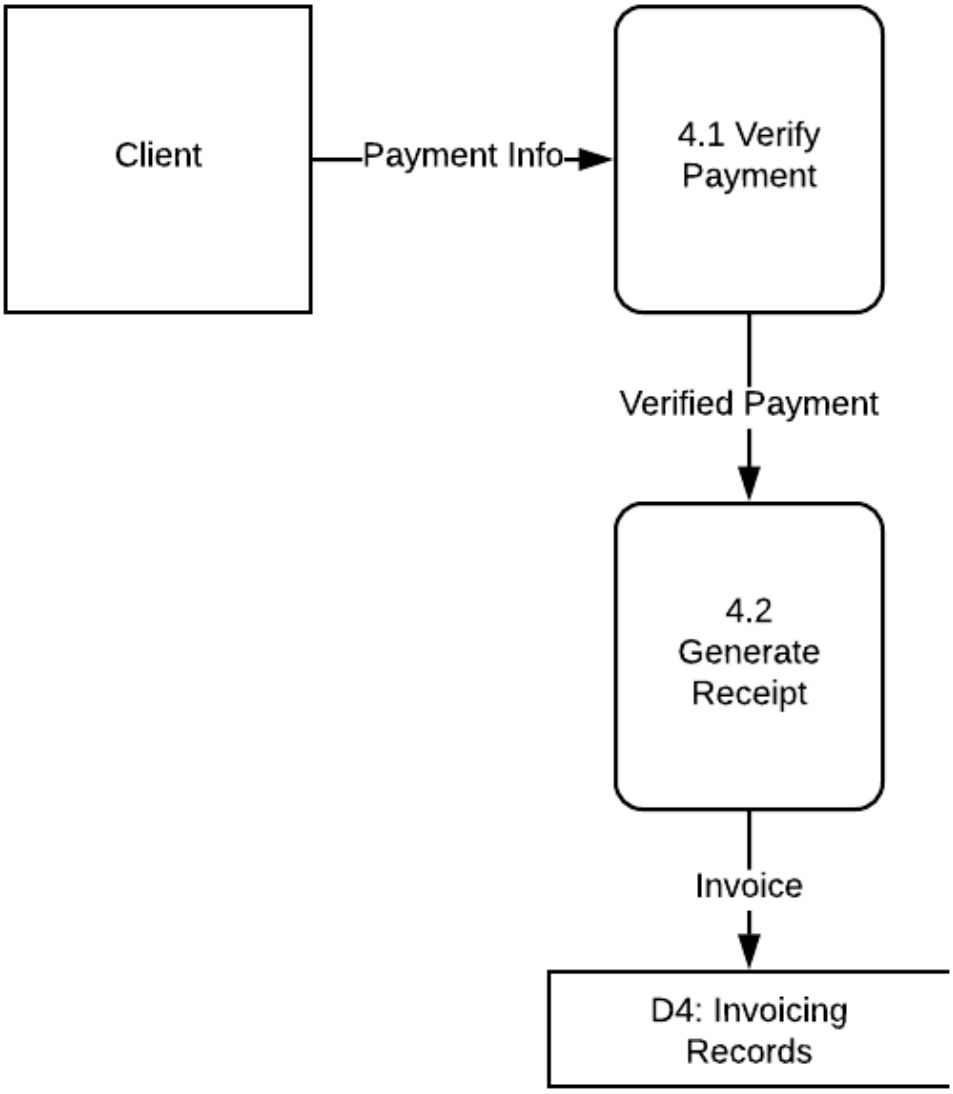
Process 3.2: Edit Report and Finalize



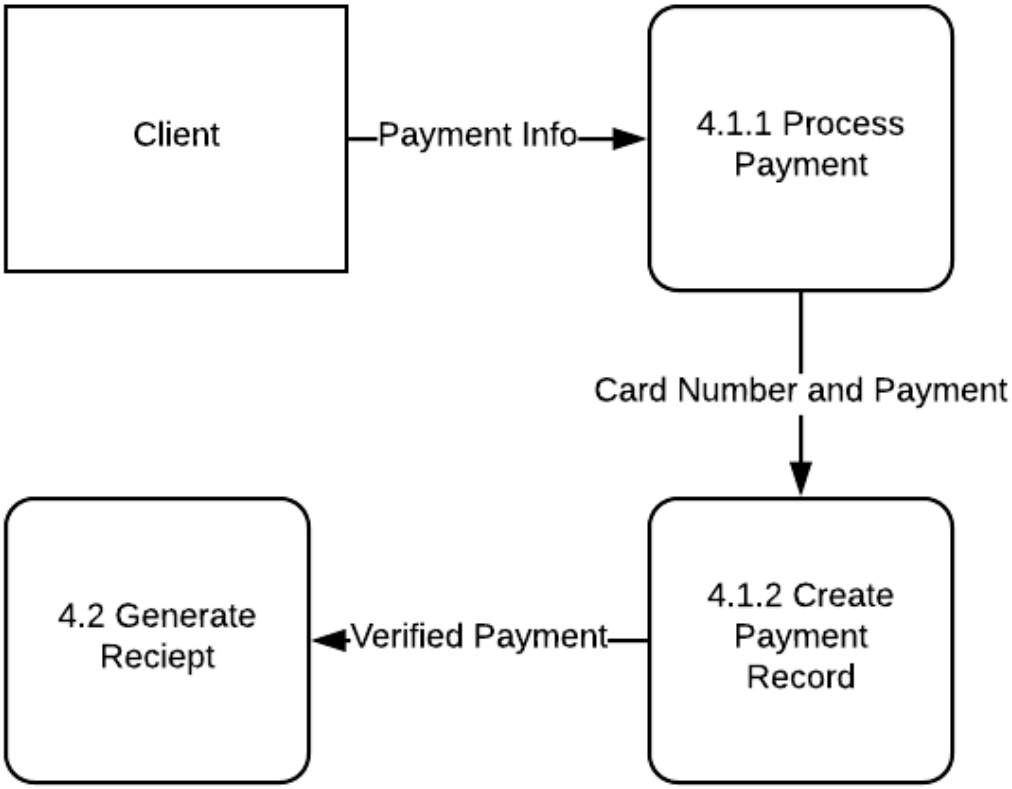
Process 3.3: Format Report for Distribution



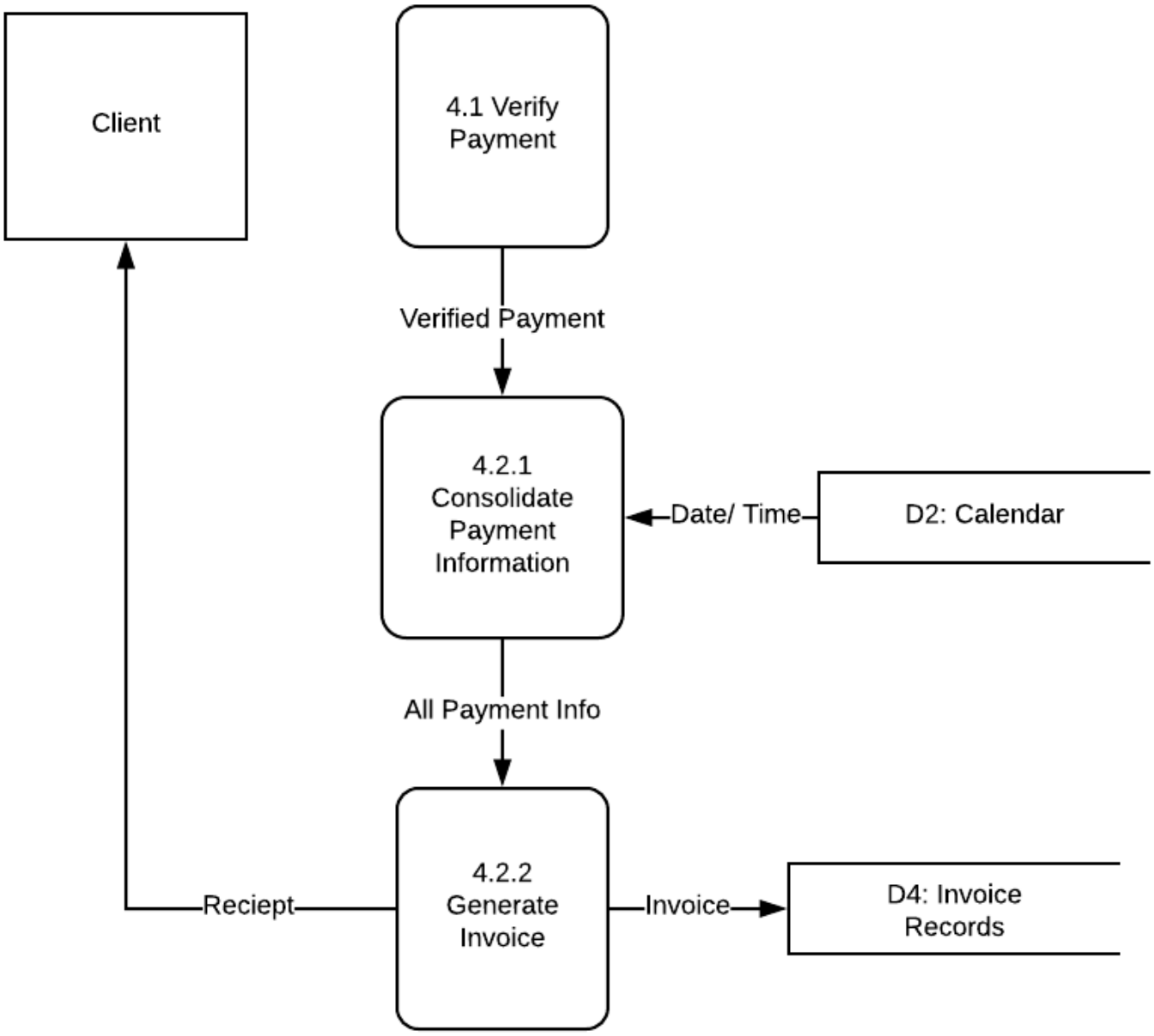
Process 4.0: Payment



Process 4.1: Payment Verification



Process 4.2: Receipt Generation



Logical Process Descriptions

Process	Name	Logic
1.1.1	Retrieve Client Data	**READ** client data **IF** client data is retrieved **THEN** store client data in D4: Past client data **MOVE TO** 1.1.2 Schedule Verification **MOVE TO** 1.1.3 Determine Inspection Type **ELSE** request client data
1.1.2	Verify Schedule	**RECEIVE** customer availability **IF** calendar is free **THEN** schedule inspection **ELSE** offer another date
1.1.3	Determine Inspection Type	**REVIEW** home data for inspection type **THEN** determine inspection type **MOVE TO** 1.3 Quote Generation
1.2.1	Validate Contract	**IF** contract returns invalid **THEN** return contract to client for completion **ELSE** contract complete **MOVE TO** 1.2.2 Edit Contract Template
1.2.2	Edit Contract Template	**IF** valid contract received **THEN** update contract with client info **ELSE** return to 1.2.1 Contract Validation
1.3.1	Determine Type of Inspection	**REVIEW** home data for inspection type **THEN** determine inspection type **MOVE TO** 1.3.2 Calculate Quote
1.3.2	Calculate Quote	**DETERMINE** home square footage **APPLY** inspection type **ALTER** inspection flat rate **MOVE TO** 1.2 Contract Generation and Validation

2.1.1	Determine Correct Template	**IF** client info received **THEN** pick correct template **FROM** D3: Inspection Templates **ELSE** retrieve client info **MOVE TO** 2.1.2 Modify Templates
2.1.2	Modify Template	**IF** correct template picked **THEN** change modify template to inspection needs **ELSE** pick correct template **MOVE TO** 2.2 Inspect
2.2.1	Meet Client	**IF** date and time received **IF** client info received **FROM** D2: Calendar **THEN** meet with client **DETERMINE** questions/ concerns **ELSE** retrieve client info **ELSE** retrieve date and time **MOVE TO** 2.2.2 Confirm/ Amend Checklist
2.2.2	Confirm/Amend Checklist	**REVIEW** client questions and concerns **IF** inspection checklist received **THEN** check/ amend checklist for additional considerations **ELSE** retrieve checklist **MOVE TO** 2.2.3 Go Through Checklist
2.2.3	Examine Checklist	**IF** final checklist received **THEN** examine checklist for errors **ELSE** retrieve final checklist **MOVE TO** 2.3 Inspection Approval
2.3.1	Detect Hazards	**IF** home data received **FROM** 2.2 Inspect **THEN** check for any on premise hazards **ELSE** retrieve home data **IF** hazards detected **THEN** move to 2.4 Inspection Cancellation **ELSE** move to 2.3.2 Finalize Inspection

2.3.2	Finalize Inspection	**REVIEW** Home Data **THEN** Save Home Data to D3 **MOVE TO** 2.3.3
2.3.3	Compile Summaries	**REVIEW** Home Data **THEN** Summarize findings **MOVE TO** 3.0 Report Generation
2.4.1	Consult Client	**FOREACH** (Hazard) **REVIEW** Hazard with client **SELECT CASE** **CASE 1** (Client wishes to move forward) **BEGIN IF** **IF** Hazard is major **THEN** Mark hazard as major **MOVE TO** 3.0 Report Generation **ELSE IF** Hazard is minor **THEN** Mark hazard as minor **MOVE TO** 3.0 Report Generation **END IF** **CASE 2** (Client wishes to cancel) **MOVE TO** 2.4.2 Cancel Inspection
2.4.2	Request Cancellation	**REVIEW** Cancellation request **THEN** Cancel Inspection **MOVE TO** 3.0 Report Generation
3.1.1	Input Data into Software	**REVIEW** Home **THEN** Input Home Data **MOVE TO** 3.1 Edit Report
3.2.1	Edit Rough Draft	**REVIEW** Report Rough Draft from 3.1.1 **IF** Any errors are found **THEN** fix errors **ELSE** 3.2.2 Report Finalization

3.2.2	Finalize Report	**REVIEW** Revise report from 3.2.1 **IF** Any errors are found **THEN** fix errors again **ELSE** 3.3 Format report for distribution
3.3.1	Input to PDF Format	**MOVE** Final Report **THEN** Save as a PDF file **MOVE TO** 3.3.2 Generate Email for Distribution
3.3.2	Generate Email for Distribution	**REVIEW** Final Report PDF **CASE 1** send PDF to client **CASE 2** send PDF to 3rd Party
4.1.1	Process Debit/ Credit Card	**IF** payment info received **THEN** payment goes through payment processing **ELSE** retrieve payment info **MOVE TO** 4.1.2 Create Payment record
4.1.2	Create Payment Record	**IF** payment has been processed **THEN** create payment record **MOVE TO** 4.2 Receipt Generation
4.2.1	Consolidate Payment Information	**IF** verified payment received **IF** calendar info received **THEN** consolidate all payment information for invoice **ELSE** retrieve calendar information **ELSE** retrieve verified payment **MOVE TO** 4.2.2 Generate Invoice
4.2.2	Generate Invoice	**IF** consolidated payment information received **THEN** use consolidated information to generate invoice **ELSE** retrieve consolidated payment info

Data Dictionary

Processes

Process 1.0: Service Request Process – This process retrieves customer information and schedules the inspection. The output for this process is a contract, signed contract or invalid contract with instructions for completing the contract accurately.

Process 1.1: Schedule Processing – This process receives the clients schedule availability and uses that in the home inspection process

Process 1.1.1: Retrieve Client Data – Part of the scheduling process is retrieving client data used for contract generation and to store for historical records.

Process 1.1.2: Verify Schedule – The appointment must be verified against the home inspectors' calendar and then approved by the client.

Process 1.1.3: Determine Inspection Type - Bartley Inspections performs several different inspections (see Deliverable 3), so during the scheduling stop, the home inspector must retrieve home data in order to determine what type of inspection is necessary.

Process 1.2: Contract Generation and Validation Process - This step involves retrieving the contract from the appropriate data store and customizing it with information from the client about the client's home.

Process 1.2.1: Validate Contract– In some cases, the contract comes back invalid, and in those cases this process is necessary to confirm that the contract has been completed correctly and if not, this process identifies the problem and sends it back to the client with instructions on how to correct the problem.

Process 1.2.2: Edit Contract Template - this is a sub process that involves physically changing the contract template to show the clients information and information about

Process 1.3: Generate Quote – quote generation takes into consideration the type of inspection and the size of home and then sends this information into the contract generation process.

Process 1.3.1: Determine Type of Inspection – determining inspection type inputs client information and home information and chooses from the list of inspections templates offered to determine which one is appropriate.

Process 1.3.2: Calculate Quote – quote calculation takes the actual size of the home and alters flat rate by inspection type and home size.

Process 2.0: Home Inspection Process - this process encompasses all the inputting of data from the home

Process 2.1: Generate Inspection Checklist – Based on templates and client info, create a checklist for the inspection

Process 2.1.1: Determine Correct Template – From client info, determine a template that is best for inspection

Process 2.1.2: Modify Template – Modify Template to preference.

Process 2.2: Inspection Process – gathering data from the home and using the inspection date and time to complete the inspection.

Process 2.2.1: Meet Client – Meet with client first thing at appointment from calendar and gather any new information or questions that may modify the checklist

Process 2.2.2: Confirm/Amend Checklist – Finalize the checklist to be done in inspection. Created from the generated checklist as well as from any specific concerns or questions by client.

Process 2.2.3: Examine Checklist – Inspect the house checking off everything in the checklist to ensure completeness.

Process 2.3: Approve Inspection Process – takes home data and reports hazardous data that can affect home inspection report.

Process 2.3.1: Detect Hazards – take the data from the inspection and identify huge hazards in the home. Let the client know if there are any and see if the inspection needs to be cancelled.

Process 2.3.2: Finalize Inspection – Finalize the inspection. Save the photos.

Process 2.3.3: Compile Summaries – Summarize findings. What is good, what could be worked on.

Process 2.4: Cancel Inspection – When hazardous data is collected, then that cancels the inspection and a modified report is created.

Process 2.4.1 Consult Client – Check with client if the hazard is enough to cancel inspection.

Process 2.4.2 Cancel Inspection – When hazardous data is collected, then that cancels the inspection and a modified report is created

Process 3.0: Report Generation Process – Home inspector inputs data into software template, which generates the template report

Process 4.0: Payment Process – Client provides payment and the process then outputs an invoice for internal record and gives the client a receipt.

Process 4.1: Verify Payment **–** Inputs payment info and verifies that the payment has been verified by the credit processing company and has gone through

Process 4.1.1: Process Debit/ Credit Card – This is done by the credit processing company to process the payment received by the client, sent to the home inspector

Process 4.1.2: Create Payment Record – A record of the verified payment is kept in a data base, accessible for future reference by the client, home inspector or 3rd party if need be

Process 4.2: Generate Receipt – After the payment has been received, a receipt of sale is generated to be returned to the client at before the time of inspection

Process 4.2.1: Consolidate Payment Information – All of the client's payment information is consolidated into a single file to be added to the invoice.

Process 4.2.2: Generate Invoice – Once the inspection is completed, an invoice of the work done and receipt of payment is sent to the client with the contract

Data Stores

D1: File Folder – A database containing all official reports and contracts completed after inspection.

D2: Calendar – A database containing all inspection appointments and corresponding information.

D3: Inspection Templates – A database containing all necessary inspection checklist templates to complete the home inspection.

D4: Invoicing Records – A database containing all records of client invoices.

D5: Photo and Info – A database containing all photos and notes of completed home inspections.

Data Flows

3rd Party Report: This report is to any party that the client asks there be an authorized report sent to.

All Payment Info: Payment info including card number and transfer of funds.

Checklist: Individual items included on the home inspection template that lists step by step, all the places that the home inspector needs to check during the inspection.

Client Copy: A copy of the finalized report is emailed to the client with the contract.

Client Home Data and Inspection Type: This encompasses all necessary home information that is used to determine the type of inspection to be performed.

Client Home Data: Type of home determines which inspection template to use. This required that the home inspector categorize the type of home prior to the inspection in order to determine which report to generate.

Client Info: Client info is used to describe the address and important home details that the home inspector will need in order to make it to the home inspection location.

Client Questions/Concerns: Once all data about the client and the home have been collected the client can voice specific concerns they have, and areas they would like for the home inspector to review and assess.

Contract Template: A template to be completed by the client that authorizes the home inspector to perform work on the client's property.

Contract: This includes a blank contract sent to the client to be filled out prior to the home inspection. This releases the home inspector from any liability in the event of an inspection error.

Date and Time: This data flow refers to the date and time of the home inspection that has been agreed upon and documented on the calendar.

Edited Rough Draft: A version of the completed home inspection report that has been edited and updated to be sent to the client.

Final Checklist: A complete checklist the entails all aspects of inspection being thoroughly completed and checked off.

Finalized Report: A version of the home inspection report that has been edited and consists of all necessary information relevant to the home inspection and client which includes the completed inspection checklist, text and/ or pictures of the inspection, notable hazards, suggestions and conclusions.

Formal Report: A version of the home inspection report that has been edited and finalized which is exported to a PDF file that will be sent to the client by email.

Hazard Type: Hazard type is documented and determines if the home inspection needs to be canceled or can move forward. If the hazard is of a certain severity, the home inspector might elect to cancel the inspection.

Home Data: This encompasses all information about the home.

Home Inspection Quote: A quote given that is an estimation of how much the home inspection will cost based on information from the client regarding the type of home and the type of inspection they are purchasing**.**

Home Inspection Report: A report that will contain the home data, inspection info and

Invalid Contract and Instructions: This happens when I client returns the contract either too late, or made an error in signing the contract, then it is returned with instructions on how to fix the error so the client can make the correction.

Invoice: Document that contains client payment information and receipt of payment, that will be sent to the client with the contract and formal report.

Payment Info: All card numbers, cash of data assigned to the payment type necessary to compensate for the inspection.

PDF File: A file type that is in a Portable Document Format. It is a file format that has captured all the elements of a printed document as an electronic image that you can view, navigate, print, or forward to someone else.

Receipt: This data flow is returned to the client after payment has been processed and contains invoicing and processing information.

Report: A document that contains information regarding relevant topics usually intended to be given to another person. In this case, a document prepared by the home inspector containing home inspection information that is given to the client.

Rough Draft: A completed document that is in need of final editing to ensure an error free report.

Schedule Availability: This is determined by accessing the calendar and comparing the client's availability with the home inspector's availability. Once a date is approved it can then be scheduled.

Schedule: The schedule is the pre-determined, confirm date of the home inspection. This date is first confirmed by the client and then by the home inspector and is documented on the calendar (D2).

Service Request: The service request is provided by the client and is the primary input for the Home Inspection System. This data flow contains client data, home data and all relevant scheduling information.

Signed Contract: This contract copy should be filled out correctly by the client in the marked areas and returned before the inspection, either virtually or in-person.

Template Retrieval: The retrieving of the necessary template to complete a task.

Template: A document that has predetermined parameters to be filled out by the client and/ or home inspector.

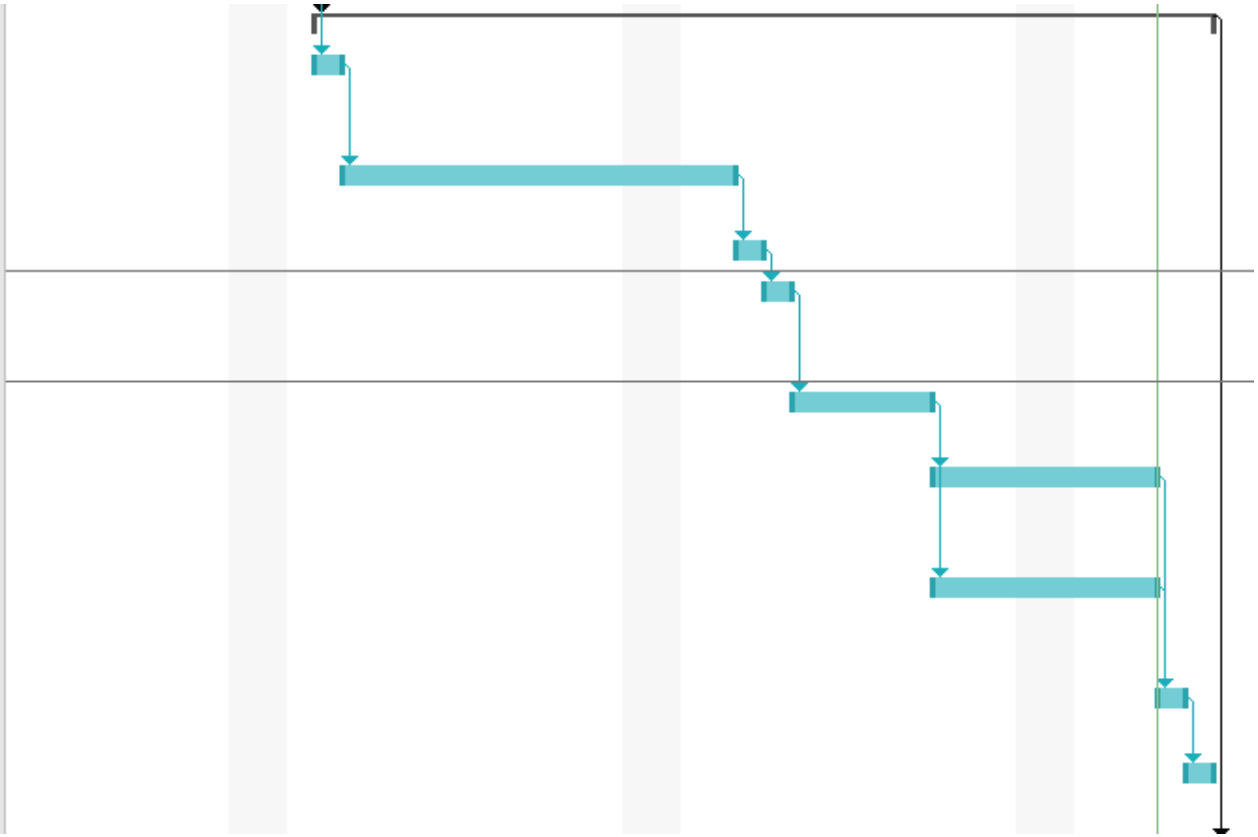
Type of Home: Information regarding the type of home the inspector will be performing an inspection on.

Valid Signed Contract: A contract that has been completed by the client, signed and validated to authorize the home inspector to perform work on the client's home.

Verified Payment: A payment from the client that has been received, processed by the credit card processing company, and verified that the payment was valid and has gone through

Gantt Chart

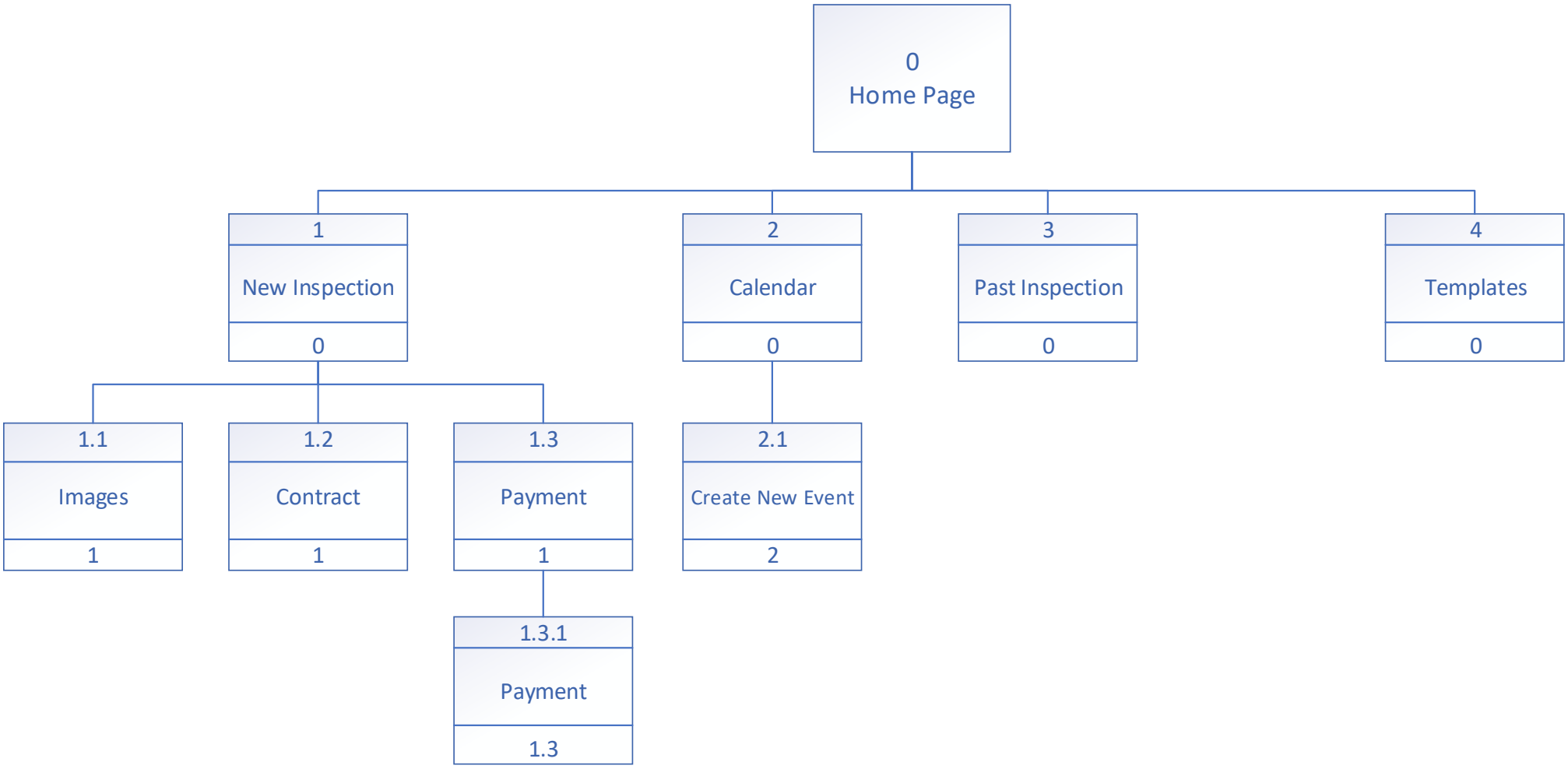
Deliverable 3	24 days	Tue 10/16/18	Fri 11/16/18
Group Meeting: Discuss Context and Lvl 0 diagrams	1 day	Tue 10/16/18	Tue 10/16/18
Finish Context and Lvl 0	10 days	Wed 10/17/18	Tue 10/30/18
DFD Walkthrough	1 day	Wed 10/31/18	Wed 10/31/18
Group Meeting: Correct Context and Lvl 0 diagrams	1 day	Thu 11/1/18	Thu 11/1/18
Complete primitive DFDs	3 days	Fri 11/2/18	Tue 11/6/18
Work on Logical Process Descriptions	6 days	Wed 11/7/18	Wed 11/14/18
Work on Data Dictionary and Data Flow	6 days	Wed 11/7/18	Wed 11/14/18
Finish Deliverable 3	1 day	Thu 11/15/18	Thu 11/15/18
Submit Deliverable 3	1 day	Fri 11/16/18	Fri 11/16/18



Decision Matrix

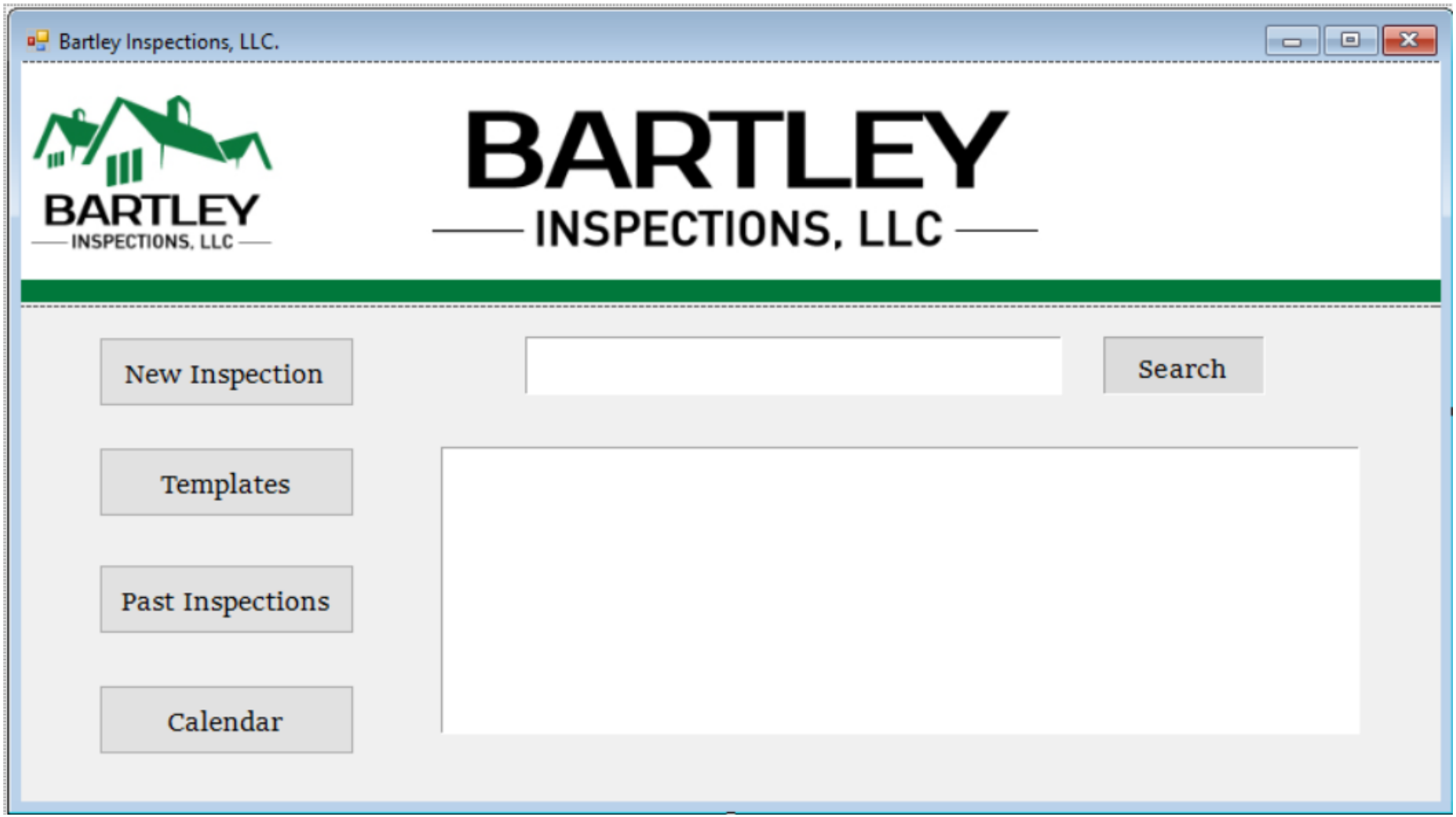
Criteria	Weight	InspectIt		Spectora		Home Inspector Pro	
		Rating	Score	Rating	Score	Rating	Score
Requirements							
Customer Service	5	3	15	5	25	5	25
Scheduling Assistance	4	2	8	4	16	3	12
Feature Heavy	4	2	8	5	20	4	16
Data Security	4	3	12	5	20	5	20
Ease of Training	3	4	12	4	12	4	12
Req Totals	20		55		93		85
Constraints							
Initial Cost	5	5	25	3	15	3	15
New Hardware Costs	4	0	0	0	0	0	0
Con Totals	9		25		15		15
Total	29		80		108		100

Dialog Diagram



Forms

Home Page:

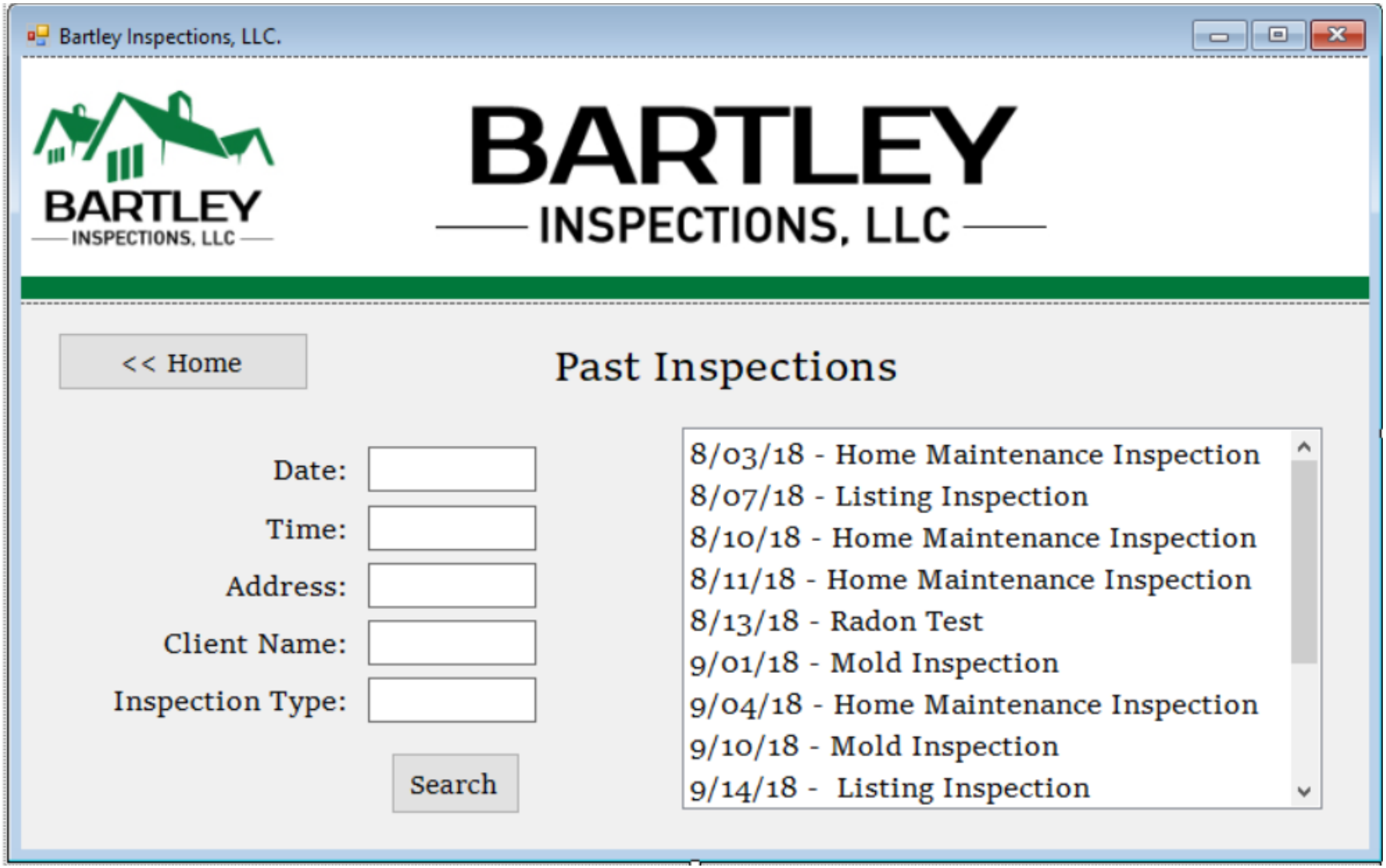


Calendar Page:

Inspection Templates Page:

New Calendar Event Page:

Past Inspections Page:



New Inspections Page:

New Images Page:

Contract Page:

Payments Page:

Receipts Page:

Design and Acquisition Plan

The proposed solution for application is purchasing the prepackaged solution Spectora that will function as a report builder as well as manage schedules and cloud datastore for client data. By being a cloud-based solution, data and reports can be accessed from any device and allows for confidence that data will not be lost if a Bartley device crashes or experiences data loss.

It is recommended that Spectora and the previous solution are done in parallel to ensure no important data is lost if there is confusion on implementation of Spectora. It may be possible to avoid having to do dual data entry if photos and summaries can be done locally then later inputted into InspectIt only if Spectora fails. The importance is to avoid spending an overly generous amount of time at the client's residence and to keep all important data so as another appointment is not necessary to recover, or retake lost data. Specifics on how this should be done are outside the scope of this proposal.

Spectora will provide cloud database storage for photos, information, report summaries, and other application specific data. Essential data however, should still be stored locally with Bartley Inspections as a safety precaution. Photos can be stored on the device of which they were taken and backup up to a computer or external hard drive. Contracts should be scanned and backed up in the same place as well as place a paper copy in a locked file cabinet.

Maintenance Plan and Strategy

The maintenance and technical support for Spectora will be provided by the software company itself. Spectora is an intuitive and easy to use software that comes with a great support forum for questions and tips on how to become a more proficient user. On the Spectora forum there are videos and step by step guides such as Spectora concepts, Spectora basics, how to get started, templates, report writing, troubleshooting and more. On support.spectora.com, there is a search engine bar that can find key words and phrases to speed up the troubleshooting process and find a solution faster. The large Spectora community also includes blogs, podcasts, resources and videos shared among users as another source of help with any maintenance or technical support. Spectora is also a cloud-based software that backs up any data inputted into the

application. If the physical device that user is using to run Spectora on is damaged, all data could be retrieved from cloud storage.

As Spectora software develops and improves, the application will update without stalling operation for the user. Spectora is easily managed and used from any location to provide the user easy access. It does not require any outside support or monitoring. The annual cost of Spectora includes all base features and with an additional fee can also include marketing and advertisement options for Bartley Inspections. Spectora is created to minimize maintenance and technical support by providing an easy to navigate and intuitive software.

Documentation plan

Spectora has a plethora of documentation for both users and receivers of the report. The documentation is primarily focused on video format so that you can watch someone walk through each of the steps that the user is trying to learn.

Because Spectora's user base is primarily small to medium sized businesses, they do not offer packages that require heavy IT usage. For this reason, System documentation is simple in nature as almost all the responsibility for data integrity. However, it is still recommended that Bartley Inspections creates documentation on best practices and their own documentation on how they like the application to be running and used.

User documentation can be created such as best practices on when to use what templates, and other business specific application of Spectora. However, the bulk of user documentation has been pre-created by Spectora themselves. It is recommended that the documentation of how agents and clients are supposed to read Spectora reports is shared with clients and agents at the time that they receive their reports for extra clarity by the users.

Testing plan

The test plan will involve the transition from InspectIt to Spectora. The main goal is to transition to the new software smoothly without interrupting work flow or compromising quality. The test plan will include tutorials and walkthroughs of the new software. The test plan will show the user how to input customer data and scheduling, conduct the report, produce the final

report, distribute the report and collect payments. The testing of Spectora will include usability and functionality described below:

- Documentation
    - System documentation
    - User documentation
- Generating test data
- Function and performance testing
- User training modules
    - Training material
    - Spectora training center
- User training plan
    - Complete training classes
    - Complete step-by-step guide
- User support plan
    - Familiarization with Spectora online support
    - Test Spectora Q&A search engine
- Walkthrough
    - Create report to test new system
    - Connect payment system to company bank account
    - Generate report
- Business acceptance that the software meets the company goals and objectives
    - Feedback on new Software
- Correct and update any issues that arise during testing phase

Metrics and Milestones

The success of the transition from InspectIt to Spectora will depend on the user's ability to adopt the new system into daily use. The purpose of transitioning to a new system is to improve functionality, cut time per home inspection, quicker report generation, and keep customer data for future use. Eric Bartley will be the deciding factor whether this system truly improves his business. Connecting customer data, payments, report generation, and home

inspection data into one software will prove to be a practical solution for Bartley Inspections. Once Eric has familiarized himself with Spectora he will be able to set defaults to allow him to produce a standard report consistently.

It is important to understand that to measure successful application implementation, the following must be in place:

Strategy	People	Process	Technology	Customers
Efficiency	User Acceptance	Internal	Spectora	Satisfaction
Business Growth	Training	External	User Friendliness	Building Reference Loyalty
Time Management		Implementing New Routine	Payments	

Integration

Because the system currently in use is an application that can only be accessed by one device, integration is not something we will need to worry about. No integration between the old and the new system will take place and Erin can simply do a back-up and make sure all relevant data has been removed from the current system and begin using Spectora.

Implementation plan

The implementation of the new software, Spectora, will be done by Eric and Amy Bartley. After a review of tutorials and Spectora training materials, Eric and Amy Bartley should be able to beginig familiarizing themselves with the Spetora system. During this time, any questions or unsatisfactory settings will be adressed and readjusted to assure compatibility. To prevent any set backs in work flow, Bartely Inspections will not completely eliminate the InspectIt system until Eric is able to comfortably transition from InspectIt to Spectora. Since there is no customer data or records to transfer from InspectIt to Spectora, the transition will be to simply start using Spectora. There is assurace that this process will be quick and smooth because of the very simple and intuigitve design of Spectora. Once Eric and Amy are able to complete a home inpection from begginning to end with satisfaction, there is little they will need to adjust for future inspections because of Spectora's ability to set default settings. If the new

system has been successfully adopted by Eric and Amy Bartley, the home inspection process should become more efficient and less stressful allowing Bartley Inspections to grow and intake more clients.

Training plan

Spectora has a variety of resources for current and prospective users to not only provide training on how to use the software, but also to discuss industry trends, provide helpful advice and discuss new ways users can benefit from their product. This means that even after Erin transitions over, he can listen to the Spectora podcasts and read their blog posts to stay up to date on what is new and emerging in the industry.

Training will be incredibly important because the faster that Erin can feel comfortable using the software, the more efficient his inspections will be. With this in mind we have created a 3-day training plan that will help him get accustom to the new GUI and get an introduction to all the resources Spectora can provide him.

First, Spectora has developed a comprehensive collection of video tutorials and other training materials for new users to get started using the software. They also provide several options from basic short videos for a general overview of topics, to 45 minute webinars where users can get questions answered from Spectora staff live. We are recommending that the training sequence should begin with attending one of the introductory webinars that Spectora provides. This webinar will introduce all the available features and help users begin to orient themselves with the basic interface. After the webinar, we are advising that Erin complete the series of YouTube videos on the various tasks he will need to be using the software for. These videos include the following links we have collected below. After completing the Webinar and the video tutorials, Erin should begin exploring the blogs and podcasts for extra resources and any specific questions left after completing the training.

Day #1:

<u>Webinar</u>

- Complete the 45-Minute Webinar introduction to Spectora.

Day #2:

Training Videos

Part 1 – Online Dashboard and Setting-up Profiles

Link: https://www.youtube.com/watch?v=aW2cp9eYrCI

Part 2 – Setting-up Services and Fees

Link: https://www.youtube.com/watch?v=FVYHHOUxGdo

Part 3 – Choosing a Scheduler and Setting Availability

Link: https://www.youtube.com/watch?v=6c1uGLTy-nQ

Part 4 – Setting Page and Integration Options

Link: https://www.youtube.com/watch?v=wg9hcMDgynQ

Part 5 – Customizing Automated Emails

Link: https://www.youtube.com/watch?v=pQndzFSTRxg

Day #3:

Blogs and Podcast

- Explore the podcast and blog resources Spectora provides for any unresolved questions.

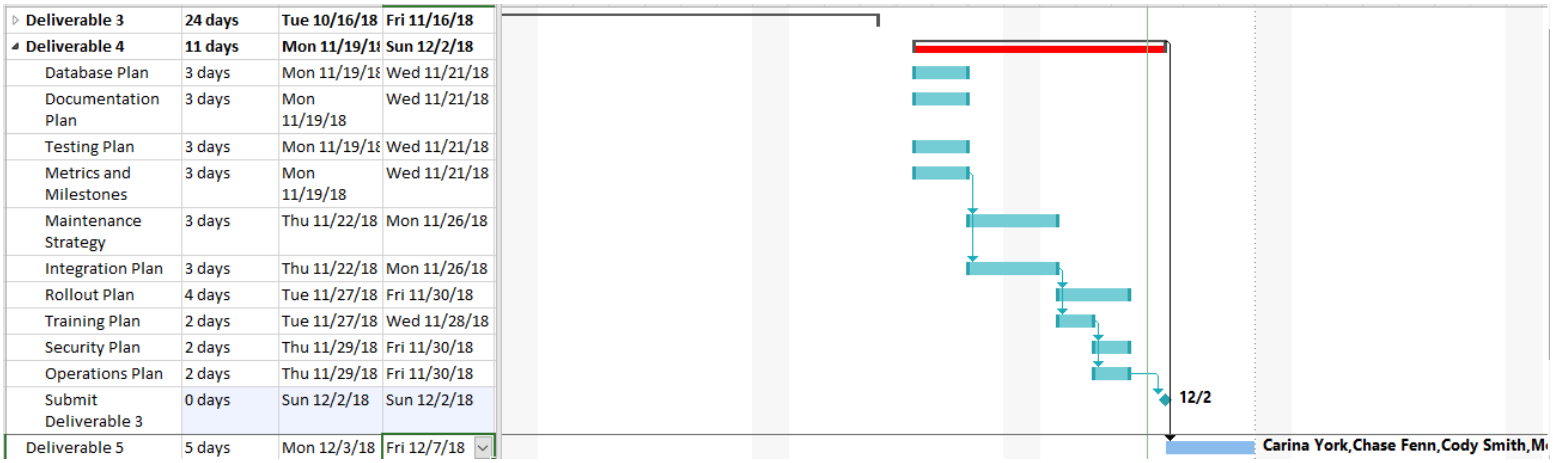
Security plan

Spectoa ensures all sensitive account data is stroed in encrypted format. The communication to and from the users server uses HTTPS encryption that protects the users data even when using public networks to conduct business. Spectoras developers also update the softwares security with the latest web security measures to ensure protection agaisnt attacks. In addition, all of the users sensitive payment related information is communicated directly from the browser to PCI- compliant payment processsors such as Authroize.net and Stripe.com. Spectora does not store or transmit any payment data on their own servers, which provides a secure environment for online payments.

Operations plan

Spectora boasts an abundance of features and tools that the user can access to easily maintain their day to day operations. Tech support, marketing support and general customer service can be accessed 24/7 nation wide. The softwares premade templates and easy to create customizable templates allow the user to get their business inspection ready in just a few clicks, ensuring a completely user friendly experience for users from all tech support backgrounds. Online tutorials that cover every aspect of the software are also available. Erin and Amy have a wide variety of source availbe at their fingertips to resolve any questions or concerns that arise.

Gantt Chart



Deliverable 3	**24 days**	**Tue 10/16/18**	**Fri 11/16/18**
Deliverable 4	**11 days**	**Mon 11/19/18**	**Sun 12/2/18**
Database Plan	3 days	Mon 11/19/18	Wed 11/21/18
Documentation Plan	3 days	Mon 11/19/18	Wed 11/21/18
Testing Plan	3 days	Mon 11/19/18	Wed 11/21/18
Metrics and Milestones	3 days	Mon 11/19/18	Wed 11/21/18
Maintenance Strategy	3 days	Thu 11/22/18	Mon 11/26/18
Integration Plan	3 days	Thu 11/22/18	Mon 11/26/18
Rollout Plan	4 days	Tue 11/27/18	Fri 11/30/18
Training Plan	2 days	Tue 11/27/18	Wed 11/28/18
Security Plan	2 days	Thu 11/29/18	Fri 11/30/18
Operations Plan	2 days	Thu 11/29/18	Fri 11/30/18
Submit Deliverable 3	0 days	Sun 12/2/18	Sun 12/2/18
Deliverable 5	5 days	Mon 12/3/18	Fri 12/7/18

Works Cited

"About This Software" *Home*, 2014, www.homeinspectorpro.com/

"Editing Inspection Agreements - Jumpstart Series." *YouTube*, YouTube, 20 Jan. 2018, www.youtube.com/watch?v=XH6N3TtaePo&index=2&list=PL5H3bnwRoWNcOY8ou0d57Jo1vyvnm30Xu.

"Features" *Features,* 2015, https://www.spectora.com/features 8 Oct. 2018

InspectIt Home Inspection Reporting Software - AHIT, www.ahit.com/products/software/index.htm.

"Pricing/ Buy." *Sign Up*, 2014, www.homeinspectorpro.com/pricing-buy.

Pro, Home Inspector. "Home Inspector Pro." *Reviews and Pricing - 2018*, 10 Oct. 2016, www.capterra.com/p/70519/Home-Inspector-Pro/.

Smith, Cody, et al. "Solution Implementation and Constraints." 4 Oct. 2018.

Spectora. "Spectora." *Reviews and Pricing - 2018*, www.capterra.com/p/157144/Spectora/.

"Setting Your Default Template & Agreement | Spectora." *YouTube*, YouTube, 2 June 2017, www.youtube.com/watch?v=P3KMZcalMtw&list=PL5H3bnwRoWNd50jfQTJoj0bxuopBWREvW.

Software Upgrades, www.inspectit.com/support/upgrades.cfm.

"Sample Report." *Powered by Spectora 2*, www.spectora.com/home-inspectors/kirwynd-real-estate-services/sample_report.

"Terms of Use." *Spectora Home Inspection Software*, www.spectora.com/r/terms-of-use/