



INTERNSHIP REPORT

ROCHELLE VAZ

1960

InBetween Software Development Pvt. Ltd.

Goa University

**INTERNSHIP REPORT DONE AT INBETWEEN SOFTWARE
DEVELOPMENT PVT. LTD.**

SUBMITTED BY:

ROCHELLE VAZ

1960

UNDER THE GUIDANCE OF

Mr. Clesiton Colaco

(Senior Test Manager, InBetween)

May 31, 2022

To Whomsoever It May Concern

This is to certify that Ms Rochelle Vaz is undergoing industrial training as an intern in Quality at InBetween software development private limited since January 10, 2022 to expected date of completion July 8, 2022 under the guidance of Mr. Clesiton Colaco, Sr. test manager.

The details of her internship with InBetween software development private limited is given below:

Project title: "InBetween - Dynamic Publishing"

Tasks handled - Software Testing:

- Different Types of Testing
- Understanding Requirements
- Test Case Preparation
- Test Case Execution
- New Features, Bug Testing
- Bug Reporting
- Product Documents/User Manual Updation

For InBetween Software Development Pvt Ltd



Niveditha Praveen
Director

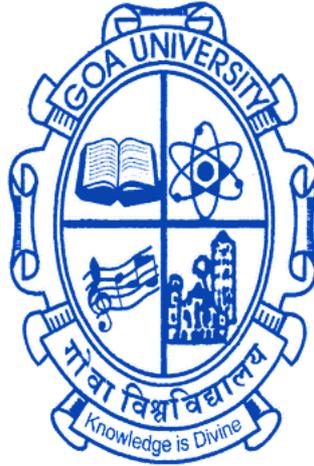


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GOA BUSINESS SCHOOL

CERTIFICATE OF EVALUATION

This is to certify that **Ms. Rochelle Vaz**, has been evaluated for her project work titled **“InBetween - Dynamic Publishing”**, undertaken at **InBetween Software Development Pvt. Ltd.**, Panaji- Goa in partial fulfilment for the award of the degree in Master of Computer Applications.

Examiner 1

Examiner 2

Place: Goa University

Date: 5th June 2022

Dean, Goa Business School

ACKNOWLEDGEMENT

I would like to take this opportunity to acknowledge and to extend my sincere gratitude to everyone who have guided and assisted me throughout the course of my internship.

Firstly, I would like to thank Ms. Rebecca Fernandes (HR, InBetween) for giving me this opportunity to do an internship in this organization.

I would also like to thank my mentor Mr. Clesiton Colaco and the entire QA team for providing me with all the help I needed during course of my internship.

Not forgetting to thank Ms. Nivedita Praveen and the entire InBetween team from whom I have learnt a lot of things. They have helped me transform into a new person ready to take up any challenges.

I would also like to thank Ms. Yma Pinto (Program Director, MCA, Goa Business School, Goa University), Mr. Ramdas Karmali (Prof. and TPO, MCA, Goa Business School, Goa University), Mr. Jarret Stevan Anthony Fernandes (Assistant Prof., MCA, Goa University) and all the other faculty members of MCA Department for their constant encouragement and support.

TABLE OF CONTENT

Sr. No.	Title	Page No.
1	Introduction	7
2	Company Profile	8
3	Project: InBetween- Dynamic Publishing	9
3.1	Problem Statement	9
3.2	Overview	9
3.3	Tools & Technologies Used	12
3.4	My Contribution	13
4	Manual Testing & Types Used	14
5	Internship Timeline	16
6	My Experience	23

INTRODUCTION

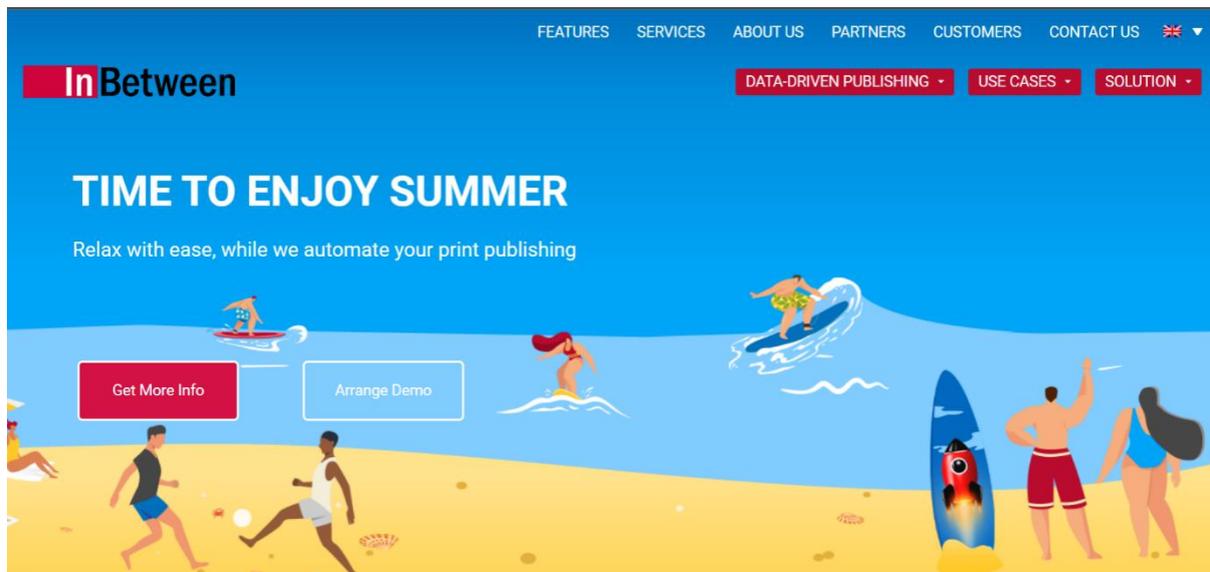
This report contains a brief description about the organization, the workflow, the tasks that I have worked on and the training that I have completed during the internship period. I joined as a QA intern at InBetween Software Development Pvt. Ltd. on January 10, 2022.

This report highlights my learning, experience and my contribution to the organization as an intern. This will also describe the knowledge that I gained after successfully completing the tasks that were assigned to me.

In the further pages, I will be talking about my contributions in the project and other tasks that were assigned to me. I will also be explaining about the tools and technologies that were used by me.

Finally, I shall wrap up with the internship timeline and sharing my experience and things that I have learnt during the internship and how it has helped me to grow both personally and professionally.

COMPANY PROFILE



InBetween Deutschland GmbH is a global leader in Database Publishing solutions. 30 years InBetween has been synonymous with high performance dynamic and database publishing. The standard software InBetween is able to create catalogs, brochures, datasheets, price lists, and many more types of media in a rule-based, automated, and format-independent manner and in a variety of outputs formats. With InBetween, your publications for marketing, sales as well as your technical documentation can be created more easily, faster, and more efficient throughout the entire company.

The development team at InBetween Software Development Pvt Ltd in Goa makes sure your requirements and our own ideas regarding new functions will be put into action. Through our software maintenance customers regularly receive enhanced and improved software versions.

More than 200 companies worldwide across over 100 industries already benefit by using the database-supported cross-media publishing provided by the market leader, InBetween. Today, InBetween is a mature technological standard solution for all aspects of modern database and Dynamic-Publishing.

KEY FEATURES

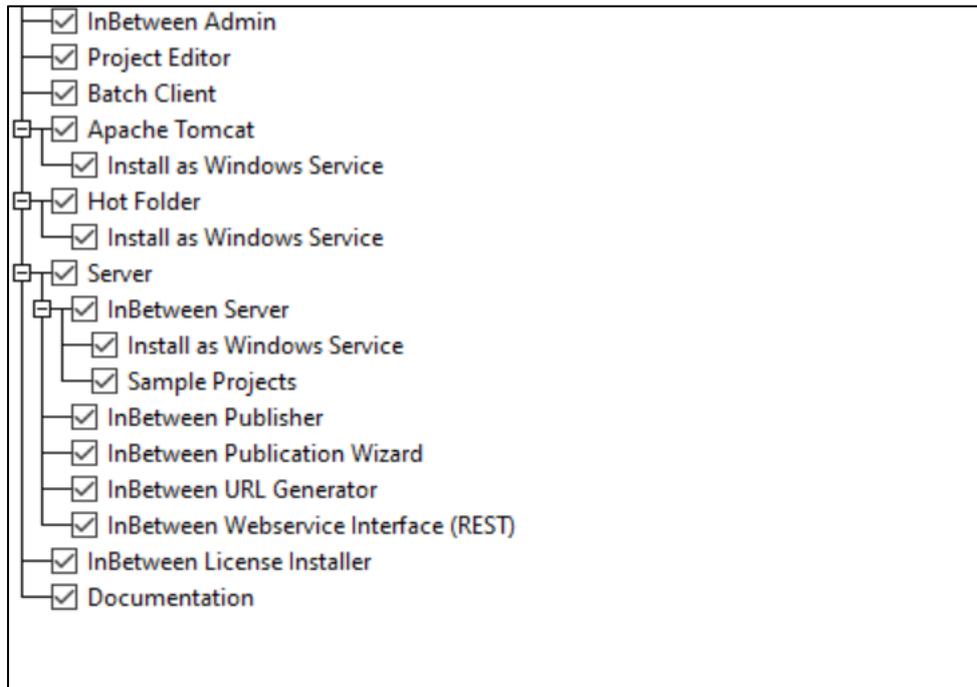
1. Flexible degree of automation
2. Publishing in a team due to web-based software
3. Language variations with just one click
4. Multiple output formats
5. Complex tables without programming knowledge
6. Easy creation of templates
7. Quick creation of publications with current and accurate data
8. InBetween Support always up-to-date with software maintenance

PROJECT: InBetween- Dynamic Publishing

Problem Statement

I was asked to test and report bugs in the different Clients of InBetween software.

Overview



IB Clients

1. IB Server

The InBetween Server is preconfigured and allows starting the InBetween Server directly after performing installation. In default configuration, it gets started on port 8000. It can be started by running 'Server-Launcher.exe'.

2. IB Admin

The InBetween Server Administrator is a tool for configuring the InBetween server and is located in the InBetween directory. Users can be created and deleted via the server administrator and user rights can be defined for individual projects. The server administrator can also query the current status of the InBetween server and close the InBetween server. In addition, the status of generations can be viewed and managed.

3. IB Project Editor

The InBetween Project Editor is the tool for the InBetween project developers. The user interface of the InBetween Project Editor is completely graphical. The user must not issue orders via a command line to run or write code. Almost all actions can be performed with the mouse and give a visual feedback. It is used while creating templates, master pages or master publications. Also, all configuration of the project are done in the Project Editor.

4. IB Batch Client

The InBetween Batch client is a Non-UI client. There is no UI interface to select InBetween project and other generation parameters for triggering generations or updating a document Batch client is mostly used when a user has to generate multiple documents(100's or more) or to update multiple documents.

5. IB Hot Folder Client

The Hot Folder is a IB client application that provides on demand generations. The InBetween Hot Folder client is a Non-UI client. There is no UI interface to select InBetween project and other generation parameters for triggering generations or updating a document. The application automatically performs different actions like generation of specific documents, updating existing documents.

6. IB SOAP Services

The InBetween Web Service Interface is provided by the web application called IB-WSBridge which is running on Apache Tomcat Server. SOAP 1.0 is used as protocol to call the InBetween methods via the web. The web service client connects to the IBWSBridge web application running on Tomcat server. The Client obtains access to the ExternalAPI interface which allows to call the InBetween server methods.

7. IB REST API Client

The InBetween REST Services are REST (Representational State Transfer) architecture-based web services. IB REST Services can be consumed by any external Third Party clients (UI/Non-UI) written in any programming language. These clients can make calls to IB REST Service.

8. IB Publication Wizard

Using the InBetween Publication Wizard, users can perform Publication generations, modify publications and pages, create new publication, upload/ delete static pages, upload data xml, convert pages. You can simultaneously trigger any number of generations.

9. IB Publisher

IB Publisher is a Web client wherein user can perform Dynamic publication generations and update a document. Here, users cannot modify the publications nor pages and nor any project level changes. This client can be customized to display additional options, configure certain projects, choose language and output formats. You can simultaneously trigger multiple generations.

10. Job Automation

Job Automation provides a user interface to easily create any number of jobs and schedule them on a single click. You can easily create, edit, duplicate, delete and save existing jobs on your machine and import the same when required later. This client is used for performing Update generations.

11. IB URL Generator

The IB URL Generator Client provides a simple URL interface which you can use to generate template, publication and dynamic publications documents. All generations performed through this client are server-side.

12. DTP Client/ QuarkXPress/ Illustrator Applications

A DTP-Client in InDesign, QuarkXPress or Illustrator is used to create highly creative and high quality documents like presentations, brochures, posters and so on. InBetween DTP Client functionality can be integrated and used in InDesign and QuarkXPress applications. InBetween plugins for Adobe InDesign and QuarkXPress are required for generation/ update/ editing of document.

13. IB Print Assistant

Using IB Print Assistant users can generate products in PDF form along with the log language.

Tools and Technologies used



Jira is a proprietary issue tracking product developed by Atlassian that allows bug tracking and agile project management.



TortoiseSVN is a subversion client, implemented as a Microsoft Windows shell extension, that helps programmers manage different versions of source code for their programs. It is a free software released under the GNU General Public License.



Gradle is a build automation tool for multi-language software development. It controls the development process in the tasks of compilation and packaging to testing, deployment and publishing.



Pulse Secure Application Launcher: The Pulse Client creates a secure connection to your corporate Pulse Connect Secure SSL VPN gateway to provide instant access to business applications and data from anywhere at any time.



VMware, Inc. is an American publicly traded software company from California which provides cloud computing and virtualization software and services.

My Contribution

My role in the company was of a QA. I tested the tickets or bugs of my team members after they fixed them. I also had to make sure that along with this fix no other existing functionality of the software was broken.

While performing testing, I have reported some bugs and created tickets for the same.

I wrote test cases for all the new features, improvement tickets and also for some bug tickets which could affect the other functionalities or other clients. I also prepared newsletter content for some improvement tickets.

I have also updated the user manuals and installation manuals with content being provided by the developer.

I also executed a list of FT's and Plugin Tests on different platforms.

MANUAL TESTING & TYPES USED

What is Manual Testing?

Manual testing is the process of manually testing software for defects. It requires a tester to play the role of an end user whereby they use most of the application's features to ensure correct behaviour. To guarantee completeness of testing, the tester often follows a written test plan that leads them through a set of important test cases.



1. **Integration Testing:** The goal is to take unit-tested components and use them to create a programme structure that is determined by design. Integration testing entails combining a number of components to achieve a result.
2. **Regression Testing:** Every time a new module is added, the application is updated. This form of testing ensures that the whole component functions correctly, even after other components have been added to the programme.
3. **Sanity Testing:** Sanity Testing is a subset of regression testing. Sanity testing is performed to ensure that the code changes that are made are working as properly. Sanity testing is a stoppage to check whether testing for the build can proceed or not.
4. **Smoke Testing:** This test ensures that the programme under test is ready or stable for further evaluation. It's termed a smoke test since it's used to see whether it caught fire or produced smoke when turned on for the first time.
5. **Performance Testing:** Its purpose is to evaluate software's run-time performance in the context of an integrated system. It's used to see how fast and effective the software is. It's also known as load testing. It determines how well the system performs under a particular load.

6. **System Testing:** System Testing is carried out on the whole system in the context of either system requirement specifications or functional requirement specifications or in the context of both. System testing tests the design and behavior of the system and also the expectations of the customer.
7. **Functional Testing:** Functional testing is the process through which QAs determine if a piece of software is acting in accordance with pre-determined requirements.
8. **Cross-platform Testing:** Cross platform testing is used to check the applicability and working of an application across different platforms such as different operating systems, browsers or even devices. Therefore, it encapsulates both cross browser (applicability of working on different browsers such as Opera, Mozilla Firefox, etc) and cross OS (applicability to work across different operating systems such as android, iOS or Windows) testing for software products.
9. **User Interface Testing:** User interface testing, a testing technique used to identify the presence of defects in a product/software under test by using Graphical user interface [GUI].

INTERNSHIP TIMELINE

JANUARY 2022

- **WEEK 1**
 1. Orientation related to the Company
 2. Work ethics and rules & regulations understanding
 3. Overview of the Company Products

- **WEEK 2**
 1. Learnt creation of new project using Project Editor
 2. Learnt Multi-machine setup
 3. Learnt about different InBetween Clients and Renderers
 4. Learnt QA process: Bug creation, writing and updating test cases, creating test cycle
 5. Learnt creation of ticket on Jira
 6. Went through the documentations
 7. Learnt how to do build installation
 8. Executed some steps of Publication Wizard [FT]

- **WEEK 3**
 1. Learnt about different Output formats supported by InBetween
 2. Learnt how to take SVN Update and perform installation
 3. Attended Sales presentation talk
 4. Completed all steps of Publication Wizard [FT]
 5. Executed InDesign DTP Client Functionality Test [FT]
 6. Executed some steps of Update of INDD [FT]

FEBRUARY 2022

- **WEEK 1**
 1. Attended scrum meeting
 2. Learnt about RIC setup, VW and execution of Regression and Smoke FT's
 3. Completed Update of INDD [FT]
 4. Executed DTP Template and Data Library test [FT]
 5. Executed Richemont Smoke Test [FT]
 6. Executed some steps of Illustrator InBetween Functionality [FT]

- **WEEK 2**
 1. Attended scrum meeting
 2. Attended Retrospective and sprint planning meeting
 3. Performed build installation on Windows and MAC
 4. Went through training program videos
 5. Learnt how to do build installation on MAC
 6. Created test tickets for all issues of the team
 7. Tested the issue of Empty document being generated in Project Editor and Batch Client when Template Appearance cp is false- Analyzed and Reproduced the issue and wrote test cases

8. Completed Illustrator InBetween Functionality [FT]
9. Executed Platform Test: MAC OS 11 Big Sur (Intel) [FT]
10. Executed Test of IB Publisher [FT]

- **WEEK 3**

1. Attended daily scrum meeting
2. Created new test tickets
3. Went through training program videos
4. Attended brainstorming session
5. Performed svn update and build installation on Windows and MAC
6. Updated user manuals with enable auto-size of Textframe for tables content
7. Tested the issue Page status is not correct in the notification message in PW, reported bug Page status tooltip not displayed correctly.

- **WEEK 4**

1. Attended daily scrum meeting
2. Attended retrospective and sprint planning meeting
3. Performed build installation on Windows, MAC and Linux
4. Wrote test cases for bug and improvement tickets
5. Reported 2 new bugs and created tickets: On performing page preview, sections are deleted and Section breaks on moving pages into section using move to/ drag drop in PW
6. Tested the issue Page status is not correct in the notification message in PW on MAC
7. Learnt about AWS Testing, setup
8. Tested issue InDesign AWS S3- Multiple bug fixes and improvements, wrote test cases
9. Tested issue Label is not proper for clear cache button in DE language in Publisher
10. Tested issue Generation fails in Project Editor
11. Tested issue Table/ data in Area properties panel is not displayed correctly in PW
12. Tested the issue Composite frame is getting too high if baseline grid is used in paragraph style

MARCH 2022

- **WEEK 1**

1. Attended daily scrum meeting
2. Attended brainstorming session
3. Performed build installation on Windows and MAC
4. Tested issue InDesign AWS S3-Multiple bug fixes and improvements, reported some issues
5. Executed Platform Test: MAC 10.15 [FT]
6. Executed Platform Test: MAC OS 11 Big Sur (Apple M1) [FT]
7. Executed RIC Regression Test [FT]

- **WEEK 2**

1. Attended daily scrum meeting
2. Learnt about Publication Planner
3. Performed build installation on Windows and MAC
4. Re-tested issue InDesign AWS S3- Multiple bug fixes and improvements

5. Tested issue InDesign generation fails at step 2 on Windows
6. Wrote test cases for issue InBetween Server temp files should be deleted without server restart

- **WEEK 3**

1. Attended daily scrum meeting
2. Attended retrospective and sprint planning meeting
3. Created new test tickets for all issues
4. Performed build installation on Windows and MAC
5. Completed testing issue InDesign AWS S3- Multiple bug fixes and improvements
6. Tested issue InBetween Server temp files should be deleted without server restart
7. Tested issue InDesign generation fails at step 2 on MAC
8. Tested issue InDesign crashes while performing frame level update (joined table)
9. Tested issue InDesign generation crashes at step 5/5 REST API error
10. Executed IB Admin test [FT]

- **WEEK 4**

1. Attended daily scrum meeting
2. Learnt about S3 Repo upload, download and delete functionalities
3. Performed build installation on Windows and MAC
4. Wrote test cases for some tickets
5. Tested issue Page should auto convert to INDD when user selects 'yes' on the caution message displayed in PW
6. Tested issue Loader not displayed when user tries to import multiple products from csv file in PW
7. Tested issue InDesign update of Dynamic table adds additional rows
8. Tested issue Support for Repo path from/ to S3 cloud
9. Tested issue New section tooltip remains visible even after deleting section header in PW
10. Tested issue On performing page preview sections are deleted in PW
11. Tested issue Implementation of JMS for Admin Projects Window
12. Wrote test cases for Batch Client does not work without Server directory
13. Executed some steps of Publication Wizard [FT] for release

- **WEEK 5**

1. Attended daily scrum meeting
2. Attended Retrospective and sprint planning meeting
3. Performed build installation on Windows and MAC
4. Tested issue Batch Client does not work without Server directory
5. Backtracked issue project outputs not generated correctly
6. Reported new bug Generations are not getting displayed in Admin Repository
1. Reported new bug Component selection color is not getting applied as per customization.xml in PW
7. Executed IB Installer (UI) Windows [FT] for release

8. Completed Publication Wizard [FT] for release
9. Executed Multi-machine Update of INDD [FT] for release

APRIL 2022

- **WEEK 1**

2. Attended daily scrum meeting
3. Performed build installation on Windows and MAC
4. Took svn update
5. Reported new bug Generations not working for cross-platform for Batch Client
6. Reported new bug Last current link gets clipped when performing re-ordering in PW
7. Tested issue Batch client does not work without Server directory
8. Tested issue on deletion of current links, re-ordering of current links is not correct in PW
9. Tested issue Upload XML should be disabled if "Upload data xml" permission is not set in PW
10. Tested issue Component selection color is not getting applied as per customization.xml in PW
11. Updated Installation manuals with Batch client module content
12. Executed Test IB Admin [FT] on Windows Server 2022
13. Executed Test REST Services using REST API Client [FT] on Windows Server 2022

- **WEEK 2**

1. Attended daily scrum meeting
2. Performed build installation on Windows and MAC
3. Took svn update
4. Wrote test cases for improvement tickets
5. Tested issue Section breaks on moving pages into section using move to/ drag drop in PW
6. Tested generation fails when multiple current links are selected for drag drop
7. Tested issue Implementation of JMS for Admin Projects window

- **WEEK 3**

1. Attended daily scrum meetings
2. QA Meeting regarding status of tasks
3. Performed build installation on Windows and MAC
4. Wrote test cases for improvement tickets
5. Learnt about Print Assistant
6. Completed testing Batch client does not work without Server directory
7. Tested issue UI flickers on reloading builder page in Edge browser in PW
8. Tested issue selectedPages parameter of customization doesn't work as expected in PW
9. Tested issue Stack element already exist in basket message not displayed in PW
10. Wrote test cases & tested issue Cross platform update generation doesn't work for Batch
11. Tested issue It should be possible to decide if files should be zipped for HotFolder
12. Executed InDesign DTP Client Functionality Test [FT] for release

- **WEEK 4**

1. Attended daily scrum meeting
2. Daily QA meeting regarding status of tasks
3. Reproduced some issues
4. Performed build installation on Windows, MAC and Linux
5. Performed svn update
6. Completed testing issue Cross platform update generation doesn't work for Batch
7. Tested issue Data refresh button disappears in Settings tab in PW
8. Executed Table Headers Test (InDesign Table Header) [FT]

MAY 2022

- **WEEK 1**

1. Attended daily scrum meetings
2. Attended daily QA Meeting
3. Performed build installation on Windows and MAC
4. Reproduced an issue
5. Tested issue Update is not working from REST API Client
6. Tested issue Last current link gets clipped when performing re-ordering in PW
7. Tested Publisher tooltip issue
8. Tested issue Null pointer exception thrown in PE console
9. Tested issue Starting PE from network drive does not load license file
10. Tested issue Multi-machine Server-side excel generations from PE are not getting saved in the given output directory
11. Reported new bug Need a responsive tooltip for Publisher

- **WEEK 2**

1. Attended daily scrum meetings
2. Attended daily QA Meeting
3. Performed build installation on Windows and MAC
4. Took svn update
5. Reported new bug Server-side generations not getting saved in mentioned directory when Local output is disabled for multi-machine cross-platform in PE
6. Reported new bug License manager reserved count for supported renderers is not working correctly
7. Created licenses, installed, removed and changed licenses.
8. Wrote test cases for Implementation of JMS for Admin Renderer screen
9. Completed testing Starting PE from network drive does not load license file
10. Tested issue On clicking sort, arrows are not changing in PW
11. Tested issue On resizing UI for builder panel, alignment of Vertical scroll bar is not correct in PW
12. Tested issue Remove unnecessary license modules from License Manager and their references
13. Re-Tested Publisher tooltip issue

- **WEEK 3**

1. Attended daily scrum meetings
2. Attended daily QA Meeting
3. Took svn update
4. Performed build installation on Windows and MAC
5. Wrote test steps for improvement tickets
6. Tested issue Basket table columns are not adjusted when resized in PW
7. Completed testing Remove unnecessary license modules from License Manager and their references
8. Tested issue License Manager reserved count for supported renderers is not working correctly
9. Tested issue Download output on Client Machine for Batch
10. Tested issue Implementation of JMS service for Repository screen
11. Tested issue Implementation of JMS service for Renderers screen
12. Tested issue Maximized button is not aligned properly when page is selected and zoom % is not retained in PW
13. Executed some steps of Illustrator InBetween Functionality [FT] for release
14. Executed Generations Test [FT] for release
15. Executed MAC: Illustrator Plugin Test (CC 2020, CC 2021) [FT] for release
16. Executed Windows: Illustrator Plugin Test (CC 2020, CC 2021) [FT] for release

- **WEEK 4**

1. Attended daily scrum meetings
2. Attended daily QA meetings
3. Performed build installation on Windows and MAC
4. Took svn update
5. Executed Test IB Installer (UI) [FT] on MacOS Big Sur version 11.6.5 Intel
6. Executed Test IB URL Generator [FT] on MacOS Big Sur version 11.6.5 Intel
7. Executed some steps Test IB URL Generator [FT] on MacOS Monterey ver 12.3.1 Apple M1

- **WEEK 5**

1. Attended daily scrum meetings
2. Attended daily QA meetings
3. Performed build installation on Windows and MAC
4. Took svn update
5. Wrote test cases for improvement tickets of Print Assistant
6. Tested issue Shared images are not generated for client-side generation Multi-machine

JUNE 2022

- **WEEK 1**

1. Attended daily scrum meetings
2. Attended daily QA meetings
3. Performed build installation on Windows and MAC
4. Took svn update

5. Tested issue Horizontal/ Vertical scroll bar is not displayed for page plan area when zoom % is changed for Print Assistant
6. Tested issue Product images should be loaded automatically for Print Assistant
7. Tested issue Pagination should be proper for Print Assistant
8. Tested issue Preview images should be shown in a square and not rectangle for Print Assistant
9. Tested issue Shared images are not generated for client-side generation Multi-machine
10. Re-tested issue On resizing UI for builder panel, alignment of Vertical scroll bar is not correct in PW
11. Completed Test IB URL Generator [FT] on MacOS Monterey ver 12.3.1 Apple M1

MY EXPERIENCE OF INTERNSHIP AT INBETWEEN

Last five months in this Company has been truly an amazing and great learning experience. This was my first step into Corporate Life. Initially it was hard in adapting to a very new place but slowly I got settled very well. The work environment is so casual & friendly that it feels so comfortable.

One of the things I like about InBetween is the encouragement and motivation at each step and the enthusiastic atmosphere all around.

There were many activities during my period of internship. Internship at the Company was a great mixture of Work & Fun. It was a great learning experience, and I also learnt many new things which would have not been possible to learn in our classroom.

Internship at this company was a great opportunity where I got to learn and implement new concepts, new ideas with tremendous support from seniors.