



## **INTERNSHIP REPORT**

Aditya Mhatre  
1933

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

**SUBMITTED BY:**

**Aditya Mhatre  
1933**

**UNDER THE GUIDANCE OF**

**Ms. Deeksha Mulgaonkar  
(Senior Web Architect)**



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May 31, 2022

**To Whomsoever It May Concern**

This is to certify that Mr. Aditya Mhatre is undergoing industrial training as an intern at InBetween software development private limited since January 10, 2022 to expected date of completion July 8, 2022 under the guidance of Ms. Deeksha Mulgaonkar, web architect.

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

Project title: "Print Assistant Project"

Tasks handled -1) Bug fixing  
2) Responsiveness  
3) Handled Functionality using Angular

For InBetween Software Development Pvt Ltd

Niveditha Praveen  
Director

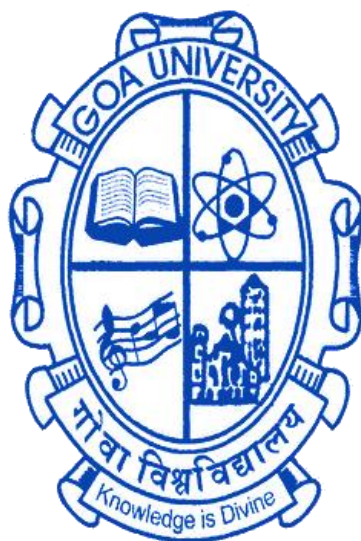


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## GOA UNIVERSITY



## GOA BUSINESS SCHOOL

### CERTIFICATE OF EVALUATION

This is to certify that Mr. Aditya Mhatre has been evaluated for the project work titled “Report of Internship done at InBetween Software Development Pvt Ltd” undertaken at , Goa in partial fulfillment for the award of the degree in Master of Computer Application.

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Examiner 1

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Examiner 2

Place: Goa University

Date:

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Dean, Goa Business School

# Acknowledgement

Interning in a company is a golden opportunity for learning and self-development specially to have so many wonderful people led me through this internship period. The internship wouldn't be complete without expressing my gratitude and appreciation to all the people who made it possible. I would like to thank Mrs. Niveditha Praveen (Director, InBetween) for giving me the opportunity to intern at InBetween. My sincerest gratitude to Ms. Deeksha Mulgaonkar (Senior Web Architect, InBetween) and Mrs. Priyanka Arundekar (Senior Web Developer, InBetween) for being my mentor and giving me the necessary guidance and support. My great appreciation to Mrs. Niveditha Praveen (CEO, InBetween) for pushing me to the limits in order to enhance and polish my skills. I would like to extend my gratitude to Mrs. Rebecca (HR, InBetween) for being my friend and always helping me out whenever I was in dire need. I would like to thank Mr. Sahil Narvekar (Quality Analyst, InBetween), who being my senior in college made me feel comfortable in a new environment and for continuously mentoring me in the technologies I was working in. I thank Mr. Ramdas Karmali (Prof. and TPO, MCA, Goa Business School, Goa University), Ms. Yma Pinto (Program Director, MCA, Goa Business School, Goa University), Mr. Jarret Stevan Anthony Fernandes (Assistant Prof, MCA, Goa Business School, Goa University), Ms Preeti Khorjuvekar , MS Payaswini , Mrs Jyoti Pawar(Program Director) and all the faculty of MCA, Goa University for their constant encouragement and support during the project work. Finally, I would like to express my gratitude towards the InBetween family who were always ready to help me and guide me in all aspects of life. They have transformed me into a new and renewed person ready to face head-on any challenges that come my way.

-Aditya Mhatre

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# Introduction

This report is a short description of my full-time on-site internship at InBetween, Goa. I joined as an Intern at InBetween on 10th January 2022 and have been here since then. This report contains necessary information about the organization, the projects I worked on and the other bugs and training's I completed in this internship period. In the chapters that will follow, I will talk about the company, the work here, the culture, etc. Then, I shall elaborate on the projects I worked on, a brief information about the projects, the modules I built and the tasks I completed in those modules. This report highlights my learning experience and my contributions to the organization as an intern. This will describe the knowledge that I gained by successfully completing the tasks that were assigned to me. I'll also be talking about the tools and technologies that were used followed by my internship timeline. I shall conclude by sharing my experience and how it has helped me to grow, both, on the personal and professional front.

## 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, data-sheets, 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. You are not only saving a lot of time and money but also nerves.



As an owner-managed company, we put great emphasis on a long-term value- and profit-oriented investment and growth strategy. Therefore, strong cooperation with our partners plays a key role in our expansion and for building up an international presence. With our competent marketing-, sales- and support team headquartered in Stuttgart and an extensive partner network on several continents, we are able to offer you all the



advantages of an efficient publication process as well as related services anywhere you want.

Our top-class 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. Because the further development of a software is just as important as what you buy today.

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. Our knowledge of the special requirements in the various branches and continuous further development of InBetween made this success possible. Today, InBetween is a mature technological standard solution for all aspects of modern database and Dynamic-Publishing.

# Project - Print Assistant

## Problem Statement

Front end: Allow clients to have the project translations in different languages , sync review products with the back-end with online capabilities, generation based on different log languages, applying customized filters to get the products based on the filter, good performance for more products

## Overview

Print Assistant is a project where client can easily generate products into PDF along with the log languages, the same was the requirement of a customer.

## Tools and Technologies Used:

- ◆ Angular 9
- ◆ HTML,CSS and Bootstrap
- ◆ SVN
- ◆ Material UI
- ◆ Gradle

## My Contributions

I was assigned to the Print Assistant front-end development, wherein my responsibilities were:

- ◆ To work on the entire UX of the application.
- ◆ Increase ease of use, add new features.
- ◆ Fix bugs in the application.

My detailed contribution is as follows:

### ✧ Login Screen

1. Updated to inputs to material UI
2. Added login button animation for better UX

### ✧ Dashboard

1. Used angular material table to display the items in a table format.
2. Added welcome message before loading the table.
3. Added the reset functionality.
4. Added application languages, the application supports English, German, and french.
5. Added search functionality.

### ✧ Download Panel

1. When the item is downloaded it will get displayed in download panel, the latest download will appear at top.
2. Added show more and show less button functionality to display the downloaded items.

3. Disabled the downloaded file, until it is downloaded completely.

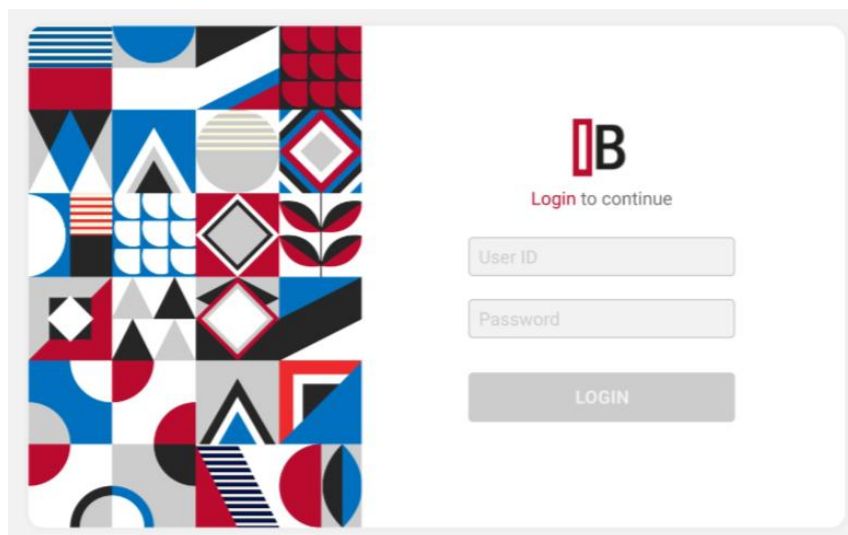
✧ Drop-down Selection of publication.

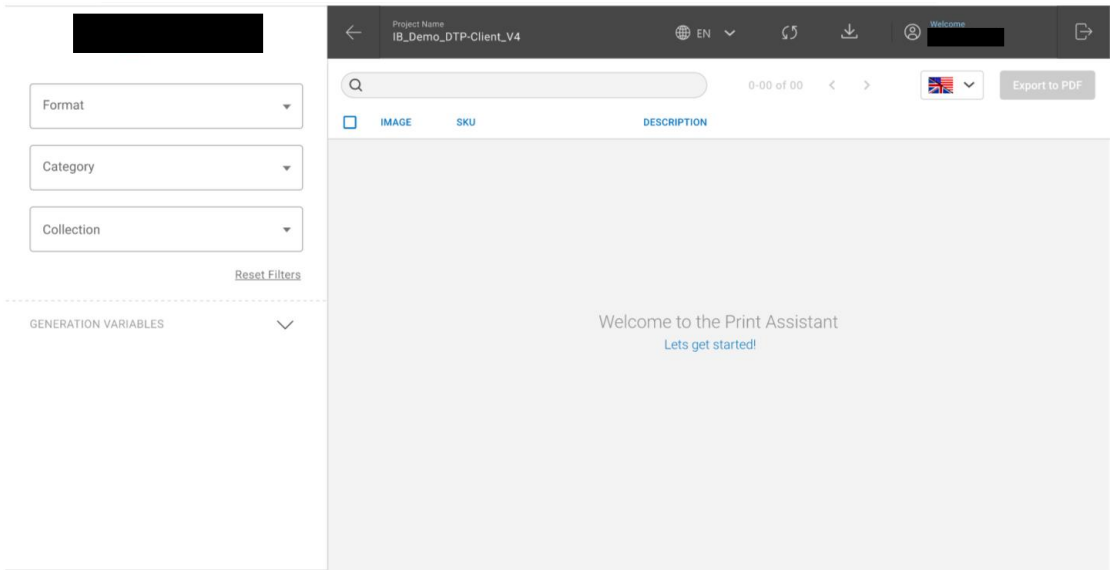
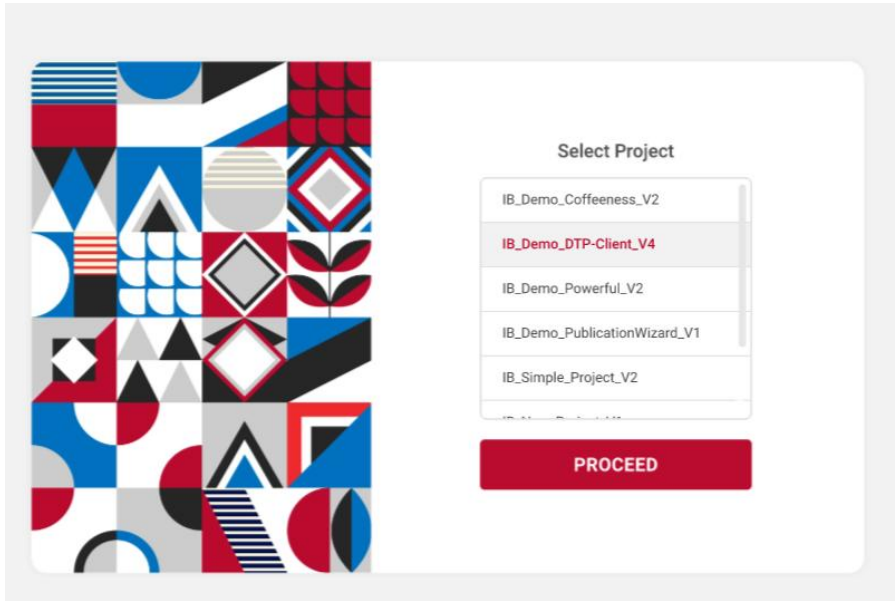
1. Added a customized drop down for selecting publications.
2. Added a customized check-boxes for selecting items in the table.

✧ Generation Variables and Filters.

1. Wrote the logic of hiding and showing the generation variables based on the projects.
2. Maintaining the panel distance equally if both generation and filters are present .

## Screenshots:





Format

Full page - Front page only

Category

Accessories

Bathroom Faucets

Bathroom Furniture

Bathtubs

Heating & Ventilation

Kitchen Sinks

Kitchen Faucets

Format

Full page - Front page only

Category

Bathroom Furniture

Collection

Aspen Collection

[Reset Filters](#)

GENERATION VARIABLES

Inventory Only

☐

Demo Product

☐

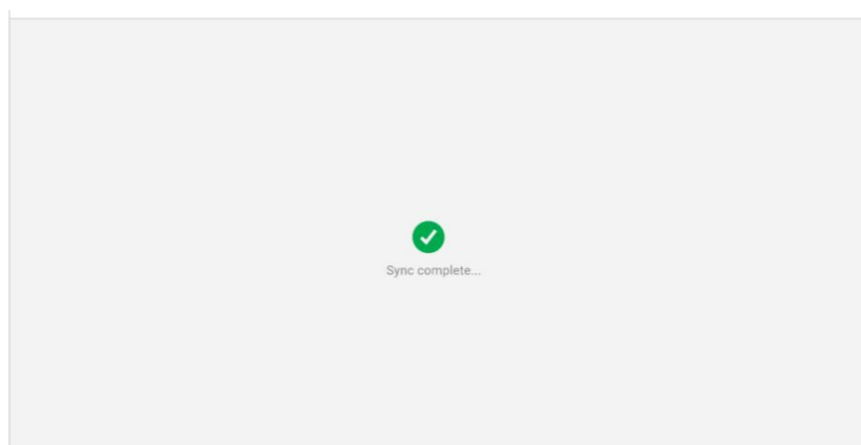
EN

Aspen\_Collection\_EN.pdf

Aspen\_Collection\_DE.pdf

DESCRIPTION

24" Dark grey marble and glossy white wall-mount vanity set



# Project - Publication Wizard.

## Problem Statement

Front end: I was asked to handle the bugs in the existing functionality.

## Overview

Publication Wizard is our UI client, where a person can do lot of things like , convert the page into In-design , or CSV, he can even generate the pages into different output formats , just like our software that is project editor. Multiple pages generation are possible too.

## Tools and Technologies Used:

- ◆ Angular 9
- ◆ HTML,CSS and Bootstrap
- ◆ SVN
- ◆ Material UI
- ◆ Gradle

## My Contributions

I was assigned to the Publication Wizard front-end development, wherein my responsibilities were:

- ◆ Fix bugs in the application.

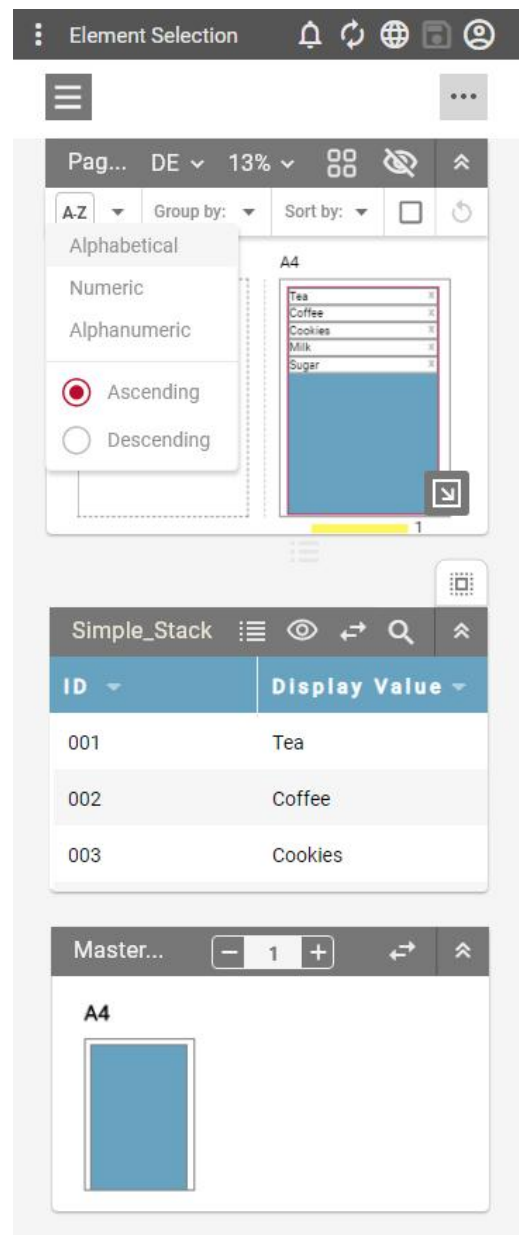
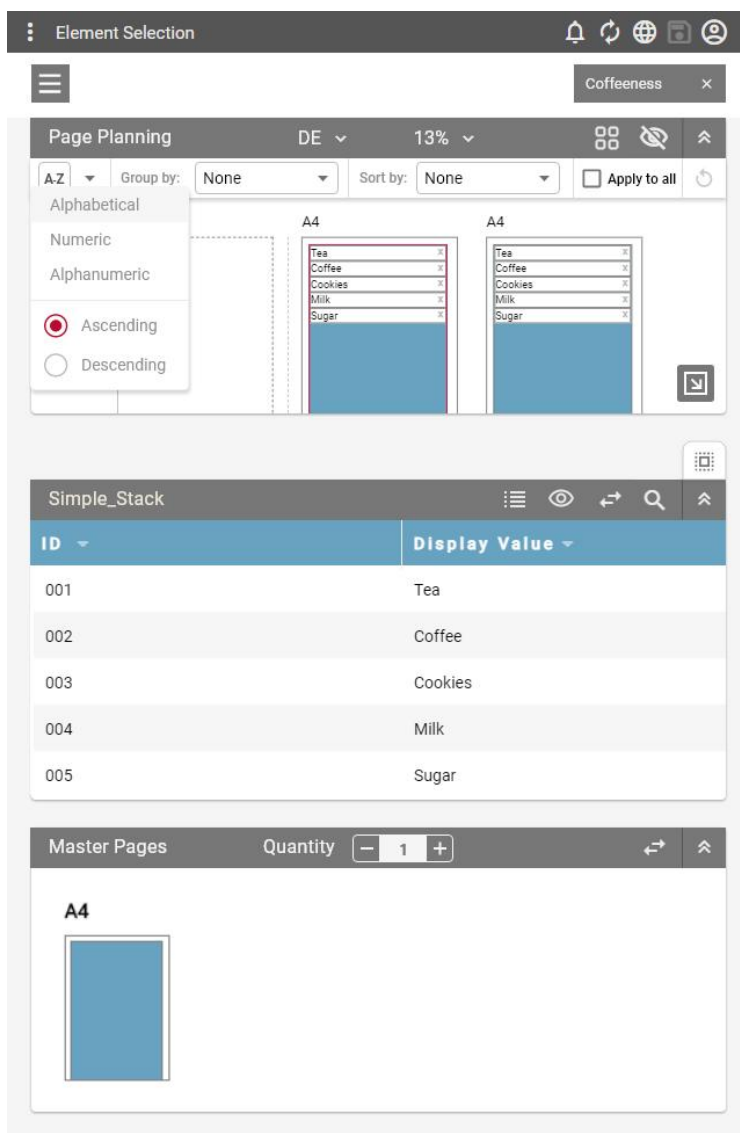
My detailed contribution is as follows:

- ✧ Spacing between the icons present in the header.
  - 1. Added spacing between the icons present in the header , so the notifications count don't get overlap.
- ✧ Made the builder page responsive for every device.
  - 1. Added media queries for mobile device and tablets.
- ✧ Some pages couldn't be dropped between two pages.
  - 1. Changed the logic of page drop , so that pages can be added between two pages .
- ✧ When we switch between tabs, the table UI used to get displayed half .
  - 1. Moved the logic table UI into life cycle hook to render it faster, while switching the tabs.



## Screenshots:

(Mobile Phones)



(Tablet)

Publication Wizard

localhost:8080/InBetween/#/Pu...

Element Selection

Coffeeness

Page Planning

DE 13%

AZ Group by: None Sort by: None

Alphabetical

Numeric

Alphanumeric

Ascending

Descending

A4

Tea

Coffee

Cookies

Milk

Sugar

1

2

3

A4

Tea

Coffee

Cookies

Milk

Sugar

A4

Tea

Coffee

Cookies

Milk

Sugar

Master Pages

1

A4

Basket

ID	Display Value
001	Tea
002	Coffee
003	Cookies
004	Milk
005	Sugar

## Tools and Technologies Used.



### **Angular**

Angular is an application design framework and development platform for creating efficient and sophisticated single-page apps.



### **Jira**

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



### **Redux**

Redux is an open-source JavaScript library for managing application state. It is most commonly used with libraries such as React or Angular for building user interfaces.



### **TypeScript**

TypeScript is an open-source programming language developed and maintained by Microsoft. It is a strict syntactical superset of JavaScript and adds optional static typing to the language. TypeScript is designed for development of large applications and transcompiles to JavaScript.



### **SonarQube**

SonarQube is an open-source platform developed by SonarSource for continuous inspection of code quality to perform automatic reviews with static analysis of code to detect bugs, code smells, and security vulnerabilities on 20+ programming languages



### **Tortoise SVN**

TortoiseSVN is a really easy to use Revision control / version control / source control software for Windows. It is based on Apache™ Subversion (SVN)®; TortoiseSVN provides a nice and easy user interface for Subversion. It is developed under the GPL. Which means it is completely free for anyone to use, including in a commercial environment, without any restriction. The source code is also freely available, so you can even develop your own version if you wish to.



### **Gradle**

Gradle is an open-source build automation system that builds upon the concepts of Apache Ant and Apache Maven and introduces a Groovy-based domain-specific language instead of the XML form used by Maven for declaring the project configuration.



### **npm**

npm is a package manager for the JavaScript programming language. It is the default package manager for the JavaScript runtime environment Node.js.

# Project timeline/Project diary

## January 2022

### ➤ Week 1:

1. Formal Orientation and on-boarding process.
2. Knowledge Transfer sessions on InBetween Software.
3. Knowledge Transfer sessions on Web based Clients

### ➤ Week 2:

1. Generated files in different formats using InBetween project editor.
2. Knowledge transfer sessions on Jira.
3. Created first ticket on Jira

### ➤ Week 3:

1. Generated files in different formats using InBetween publication wizard, URL generator.
2. Knowledge transfer sessions on Batch Clients , and how they work.
3. Knowledge transfer sessions on Gradle.

➤ Week 4:

1. Knowledge transfer sessions on Publisher and Admin.
2. Knowledge transfer on best web practices and how to write code efficiently , considering the time complexity.
3. Knowledge transfer sessions on Tortoise SVN, how to commit the code in branch , how to resolve the conflicts and other features of Tortoise SVN

February 2022

➤ Week 1:

1. Started learning angular , created tower of heroes app.
2. Got in depth knowledge transfer sessions on Publication Wizard.

➤ Week 2:

1. Started testing the bugs of Publication Wizard, and tried to reproduce it.
2. Solved the bug , send it for QA to test after committing the code and updating the fields of Jira.
3. Started working on another bugs.

➤ Week 3:

1. Solved some more bugs and improvements, got it confirmed

from ux designer and tried different test cases, for testing purposes.

- Week 4:
  1. Knowledge transfer sessions on Publication Planner.
  2. Went through ES6 documentation to understand new functionalities.
  3. Read through the ppt of how to write the web apps code efficiently, which was created by senior developer

## March 2022

- Week 1:
  1. Read the angular documentation to understand life-cycle hooks .
  2. Applied the concept of life cycle hooks into one of the functionality to fix the bug.
- Week 2:
  1. Read the angular documentation and few other references to understand the use of Input, Output and View child bindings to understand communication between two components.
  2. Knowledge transfer session on print assistant.
  3. Analyzed the tickets of print assistant.

- Week 3:
  1. Had discussion with UX developer to get the clear idea of UI to be developed.
  2. Started creating the UI of login page.
  3. Read some articles on advanced CSS methods and implemented the same on login screen.
  
- Week 4:
  1. Created the UI of login page and got it verified with UX designer.
  2. Started creating the UI of project selection page.
  3. Completed the UI of project selection page.
  4. Got it verified with UX designer.

## April 2022

- Week 1:
  1. Started with dashboard UI and table UI along with header .
  2. Completed the UI of header, table and dashboard .
  
- Week 2:
  1. Created customized drop downs for the project selection and filters.
  2. Wrote the hide and show logic for generation variables.



3. Made the preview images fit into a small square box for the items.

- Week 3:
  1. Created Customized check-boxes for generation variables.
  2. Created the reset functionality, to reset everything and display a message.
  3. Completed the responsiveness of builder tab area of publication wizard.
- Week 4:
  1. Completed few bugs of publication wizard and committed the code once it was approved.
  2. Customized the UI of print assistant for bigger screens.
  3. Added material tool-tips for buttons and other drop-downs.
  4. Wrote the logic for login button colour change once the credential field is filled.

## May 2022:

- Week 1:
  1. Got knowledge transfer sessions on Job Automation Client .

2. Added french translation for the print assistant.
3. Completed the application language functionality.

➤ Week 2:

1. Generate additional components for the print assistant.
2. Used table data-source filter for search functionality.
3. Used custom pipes for filters.
4. Wrote the logic of log language filters.

➤ Week 3:

1. Read MDN documentation to understand web workers.
2. Tried to optimize the performance of print assistant by analyzing the code and make the time complexity of few functions .
3. Added the show More/Less panel for downloaded items.
4. Disabled the downloaded file until it is downloaded completely, for user friendly reasons.

➤ Week 4:

1. Meetings with senior programmers and CEO, for the advance features in InBetween ui and non ui clients.

2. Completed few bugs of publication wizard and committed the code for the same.
3. Changed the logic of check-box when filters are applied.
4. Used observable and subscriptions to get the response from the back-end.

## References

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