



JK LAKSHMIPAT UNIVERSITY
Institute of Design

Rad X - Reimagine the world of radiology

VOL 2 of 2

Student :- **Manasi Saxena**

Sponsor:- **5C Network India Pvt Ltd**

Mentor:- **Mr Anirudh Biswas**

Programme :-
Masters of Design (M.Des)
Interaction Design

THE 
**GRADUATION
PROJECT 2024**

Testing

Task selection and protocol

Test and feedbacks





Testing



Test Protocol

PART 1

Task Selection

Task selection is vital to assess system performance comprehensively. It involves choosing tasks that effectively challenge and evaluate the system's capabilities under varied conditions.

Metrics: Task Completion, Task Duration, Misclicks and Number of pages visited

PART 2

Qualitative Feedback

"The questions were asked and answered openly and recorded in writing.

Total 10 Participants were taken

Task Selection



Quantitative Test



Maze, a usability tool, was used to gather performance usability data such as task completion, duration, and error rates.

Qualitative Feedback



Participants were asked open-ended questions and provided their feedback on the overall experience.

Correction



Based on data analysis, the identified problems were addressed and corrected in an updated design.

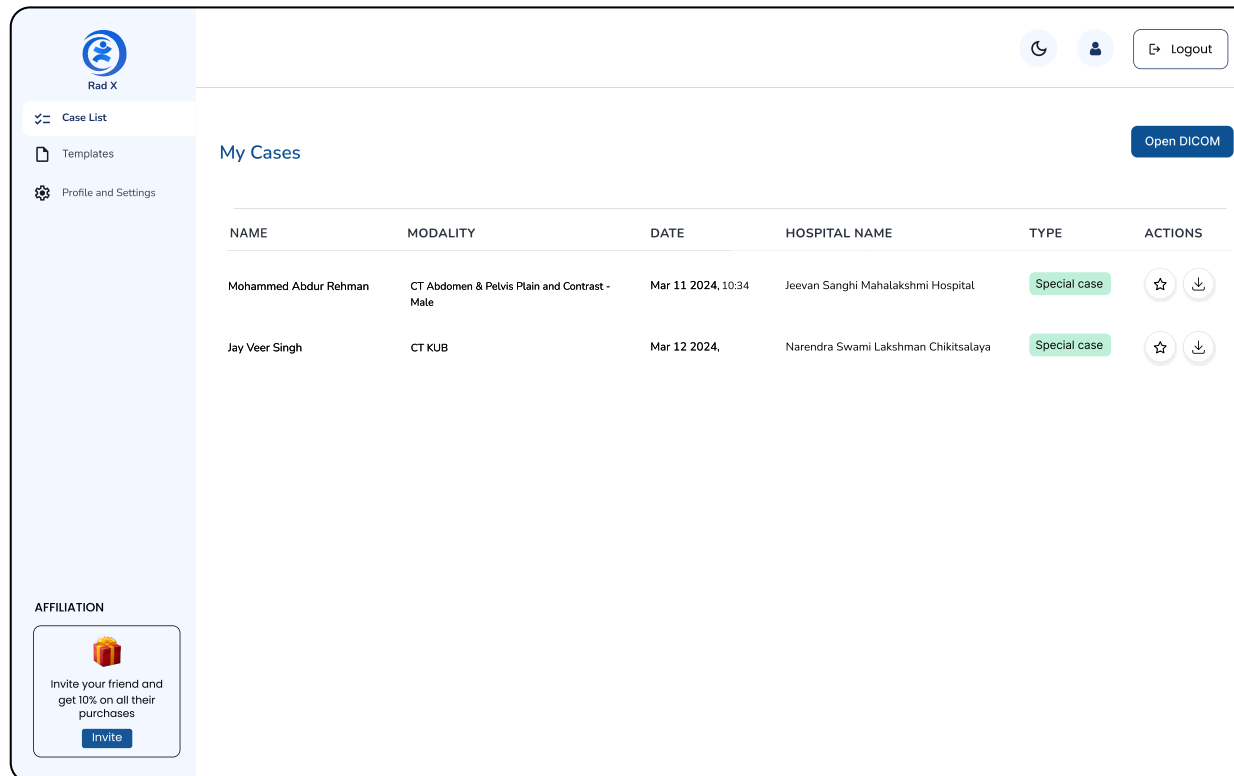
Feedback

Task 1

1. Add a case to favorites
2. Open DICOM and start reporting
3. Download the report of specific case

Results

1. The average task completion was 100%
2. The participants were able to complete the task in 1.03 sec on avg
3. No misclicks happen and users do not click the wrong place.
4. On average 3 clicks for 3 tasks as everything kept in front of the eyes.



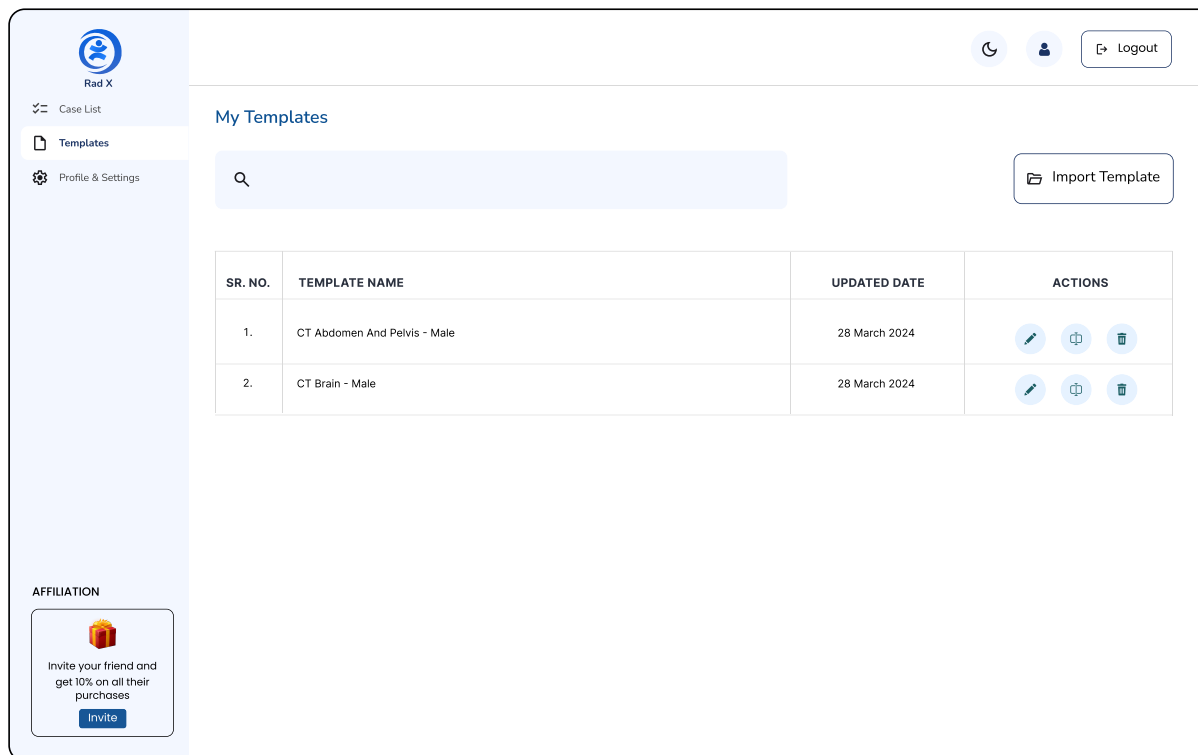
Feedback

Task 2

1. Import template
2. Try search any template
3. Perform actions such as Rename, Edit and delete the template

Results

1. The average task completion was 98%
2. The participants were able to complete the task in 1.57 sec on avg
3. No misclicks happen and users do not click the wrong place.
4. On average 8-9 clicks for 3 tasks as everything kept in front of the eyes.



Rad X

Case List

Templates

Profile & Settings

Profile and Settings

Update and change your profile and settings according to you anytime. Just double click to change

Basic Info

Name: Dr. Amit Shrivastava

Email Id: amit_shrivastava@gmail.com

Phone Number: +91 9844736489

Education: M.D In Radiology, M.B.B.S In Radiology, B.Sc in Radiology

Address: India Chowk, Rajpur Rd, Malsi, Dehradun, Uttarakhand 248001

Date of Birth: 28 October 1978

UPDATE

Letter Head

Drag and Drop the image

See the change in the image in the right side

Signature

Drag and Drop the image

See the change in the image in the right side

Custom Disclaimer

Here, you can type or copy paste (Ctrl+C and Ctrl+V) to write a Custom Disclaimer

UPDATE

AFFILIATION

Invite your friend and get 10% on all their purchases

Invite

Letter Head

Yash Patel

Sex: _____ Age: _____

Rx

Letter Foot

Feedback

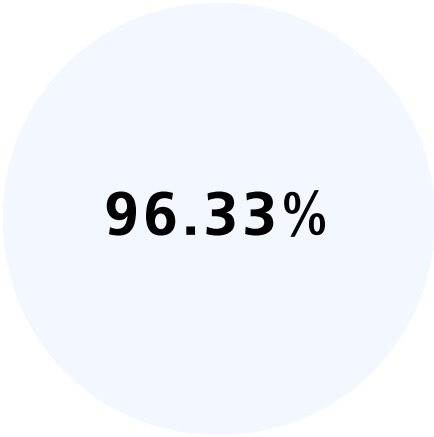
Task 3

1. Try editing basic information
2. Upload letter head and signature
3. Add custom disclaimer

Results

1. The average task completion was 92%
2. The participants were able to complete the task in 2.09 sec on avg
3. Misclicks happen when editing the basic infir and also the 2 update button confuses the user.
4. On average 16 clicks for 3 tasks as everything kept in front of the eyes.
5. Developmental issue - realtime showing letter head ans signature was a problem. It does not come everytime.

Averages



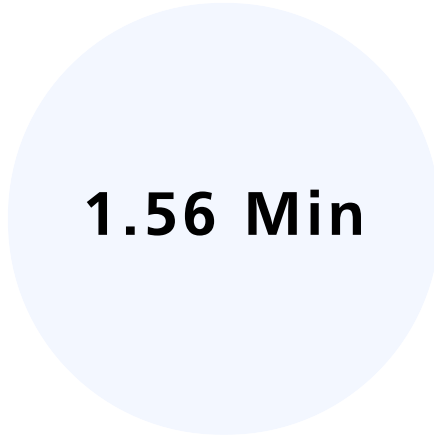
96.33%

**Average Task
Completion**



2

**Average Wrong
Clicks**



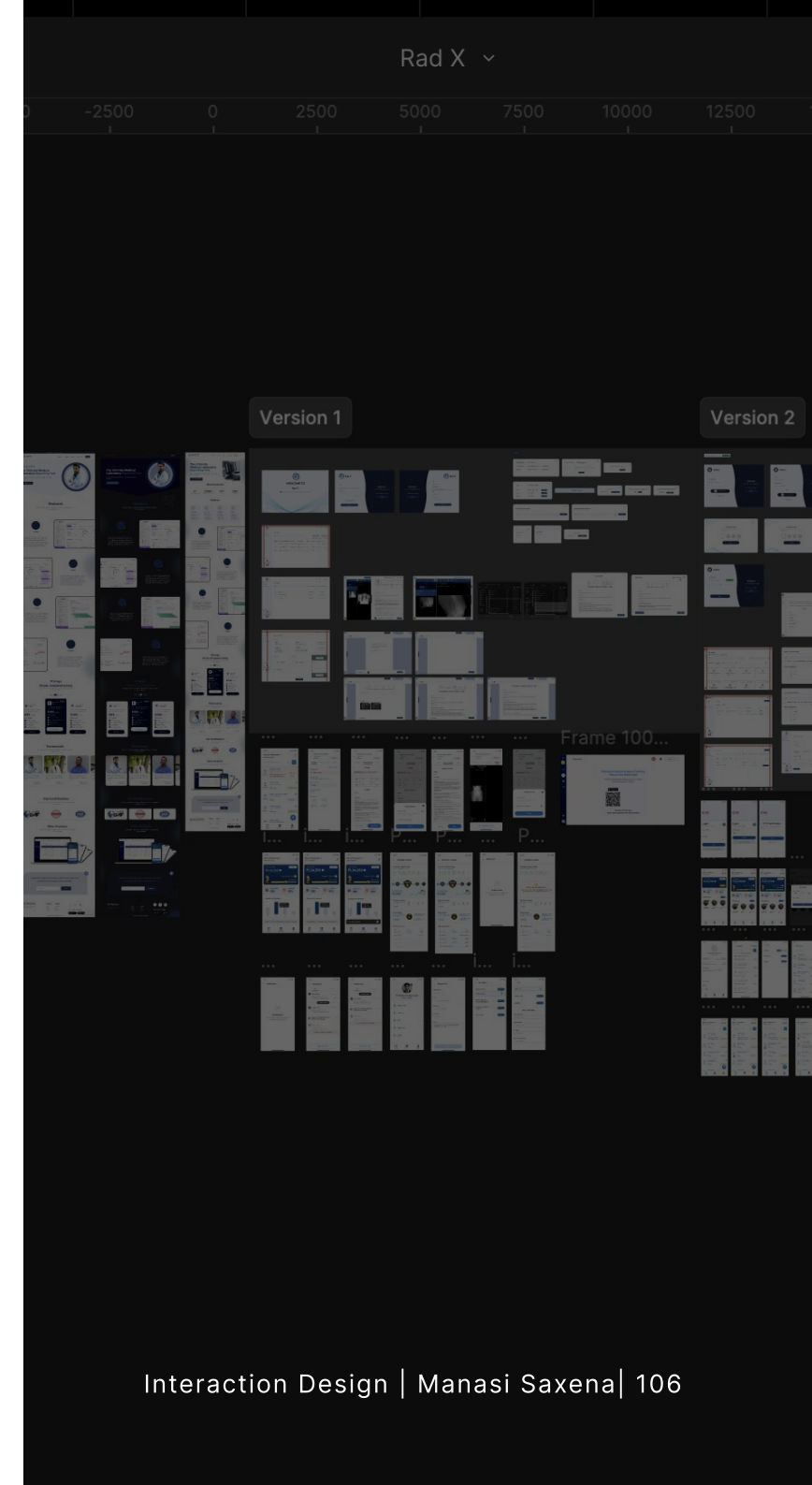
1.56 Min

**Average Task
Duration**

Added features

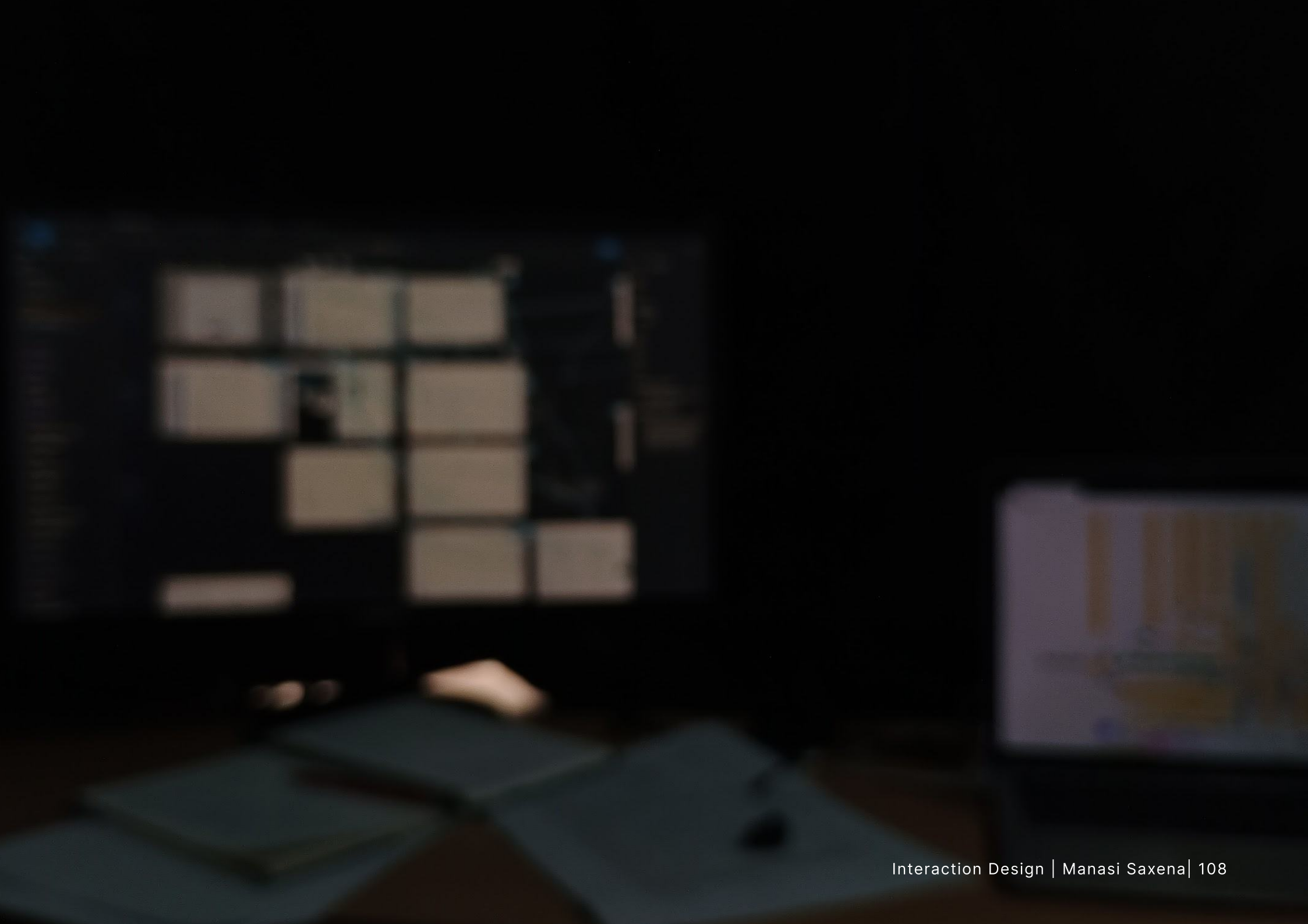
After analyzing the testing metrics and open-ended questions, numerous potential features emerged. We have initiated work on these with the development team. Some of these features were already planned, but were not included in version 1 due to company constraints. However, they are now feasible for inclusion in version 2.

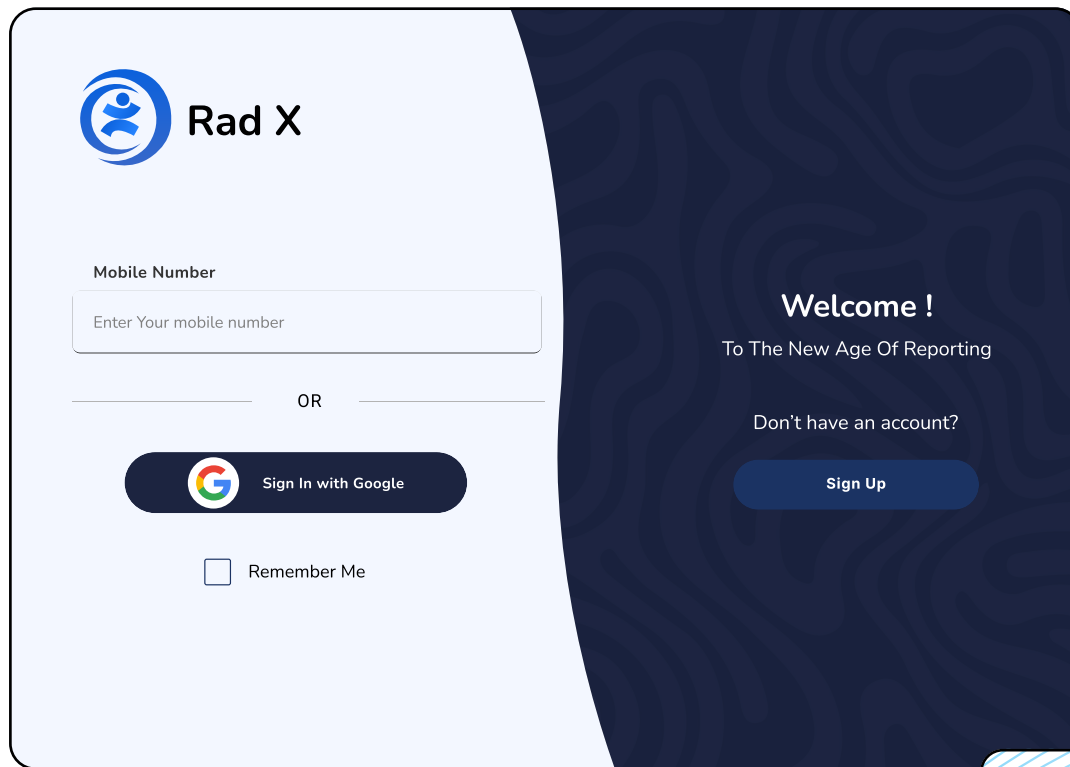
1. **Mobile OTP Login:** No need to remember passwords anymore.
2. **Color-Coded Status:** Easily understand the status of reports at a glance.
3. **Template Categorization:** Organize templates for better usability.
4. **Single and Bulk Template Import:** Import single or bulk templates with ease.
5. **Enhanced Split Screen Functionality:** Now includes upper minimize section and drag options for improved usability.
6. **Information Chunking (Tab Section):** To increase efficiency and reduce scrolling, we've divided information into chunks, decreasing cognitive load.



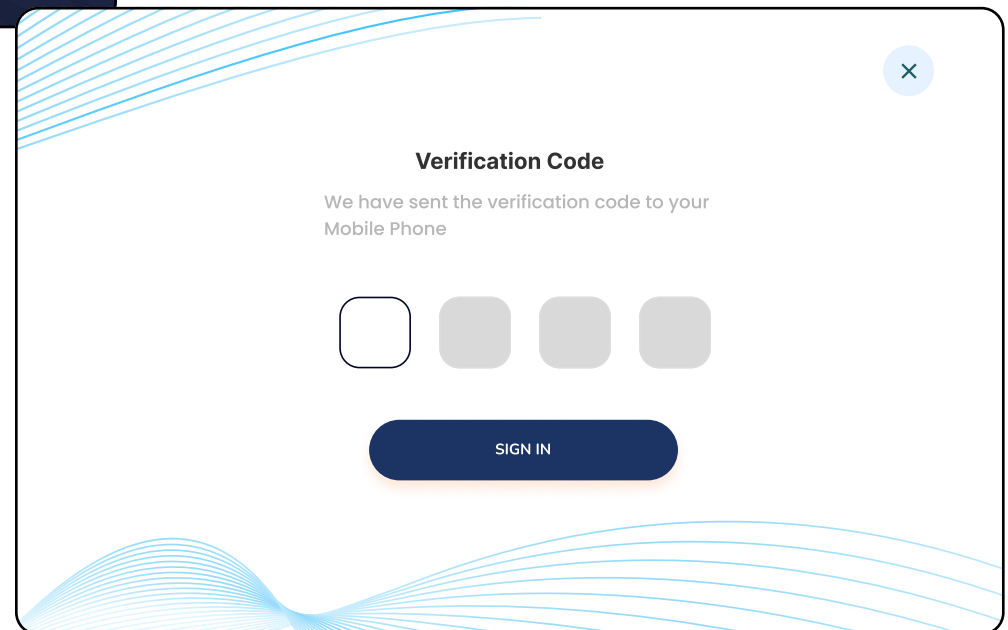
Hi-Fidelity Version 2

After testing, we added more features to the UI and improve the previous interface





Seamless Login with mobile OTP



A Search Bar To Quickly Find Specific Cases.



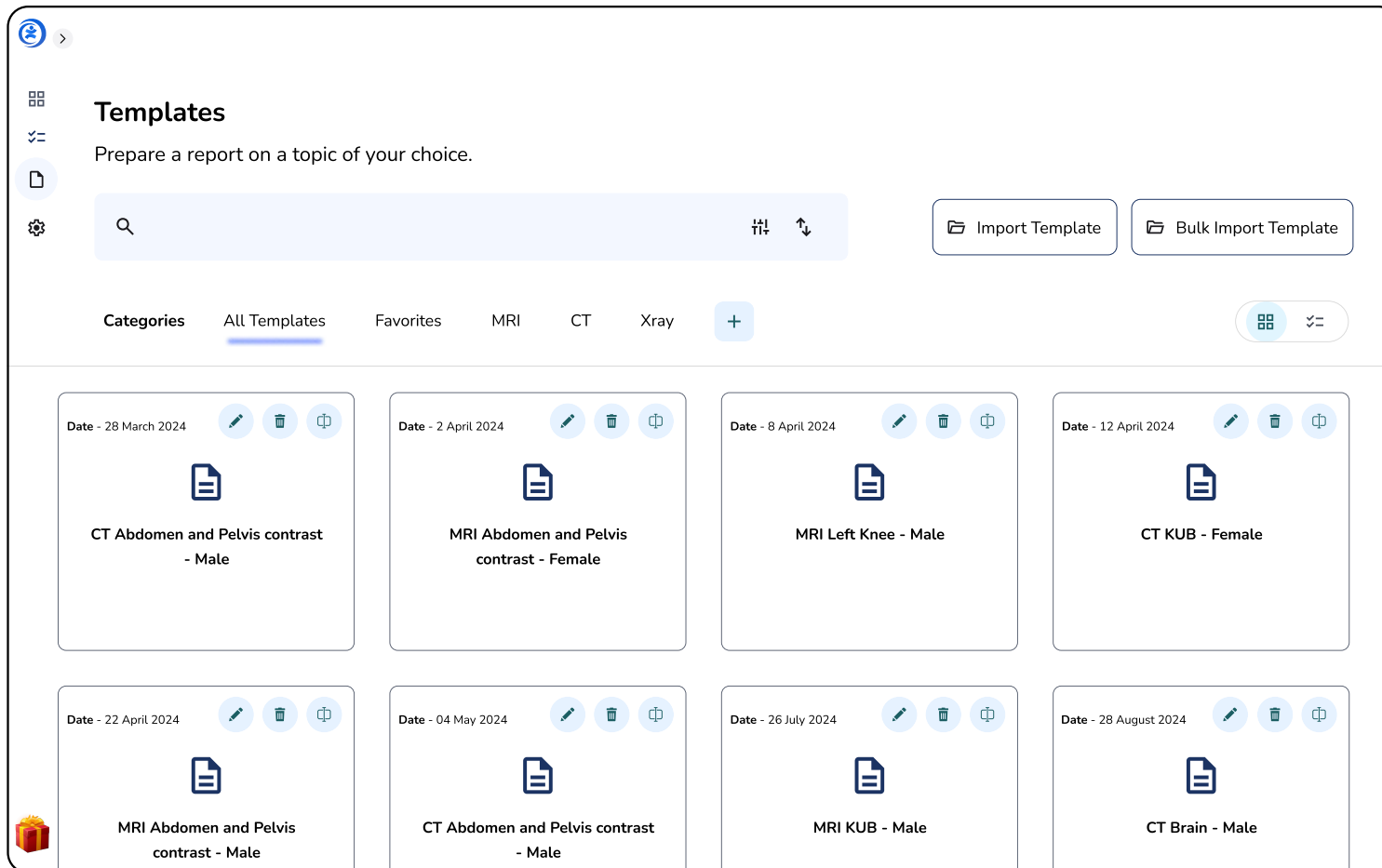
Opens A DICOM With Uploaded Images

Opens A Black Report Section

Colored Dots To Indicate The Status Of The Case (Completed - Green, Draft - Blue, Unreported - Gray).

Icons For Editing, Viewing, And Sharing The Report.

An Invitation To Refer Friends For A 10% Discount On Purchases, Enhancing User Engagement And Growth Through Referrals.



Features:

Import Template -

Import own templates if you want to add of your own.

Bulk Import Template -

Now, bulk imports of templates. if you have more than one template to import here is an option for you.

Benefits:

- **Efficiency:** Quickly find and manage templates.
- **Customization:** Tailor organization to fit needs.
- **Consistency:** Maintain a uniform system across users.

Key Features:

1. Folder Creation:

- Create and manage custom folders for templates.
- Manual categorization for personalized organization.

2. Categorization Options:

- Automatic categorization by template names.
- Multiple predefined categories (Favorites, MRI, CT, X-ray).

3. Template Management:

- Search functionality for quick template location.
- Edit, copy, and delete actions for each template.

Do you want to Rename it?

Put name according to your preference and organize it according to your need

Start typing here

Cancel DONE

☐ Categorize your template in folders according to it's name

OR

Manual Categorization

Organize the template as you need

☐ Favorites

☐ MRI

☐ CT

+ Create a Folder

SUBMIT


Rad X

 Case List

 Templates

 Profile & Settings



Logout

Profile and Settings

Update and change your profile and settings according tto you anytime. Just double click to change

Basic Info

Name

Dr. Amit Shrivastava

Email Id

amit_shrivastava@gmail.com

Phone Number

+91 9844736489

SIGNATURE

SERVER DETAILS

CHANGE PASSWORD

Signature ☐

 Draw

 Upload

 Type

Draw your Signature here

Name

Dr. Amit Shrivastava

Designation

Consultant Radiologist

Qualification

MBBS, MD

Medical Registration Number

UHN-KPB-1839747

Preview

Reported By,



Dr. Amit Shrivastava

MBBS, MD

KPB-1839747

Consultant Radiologist

Submit

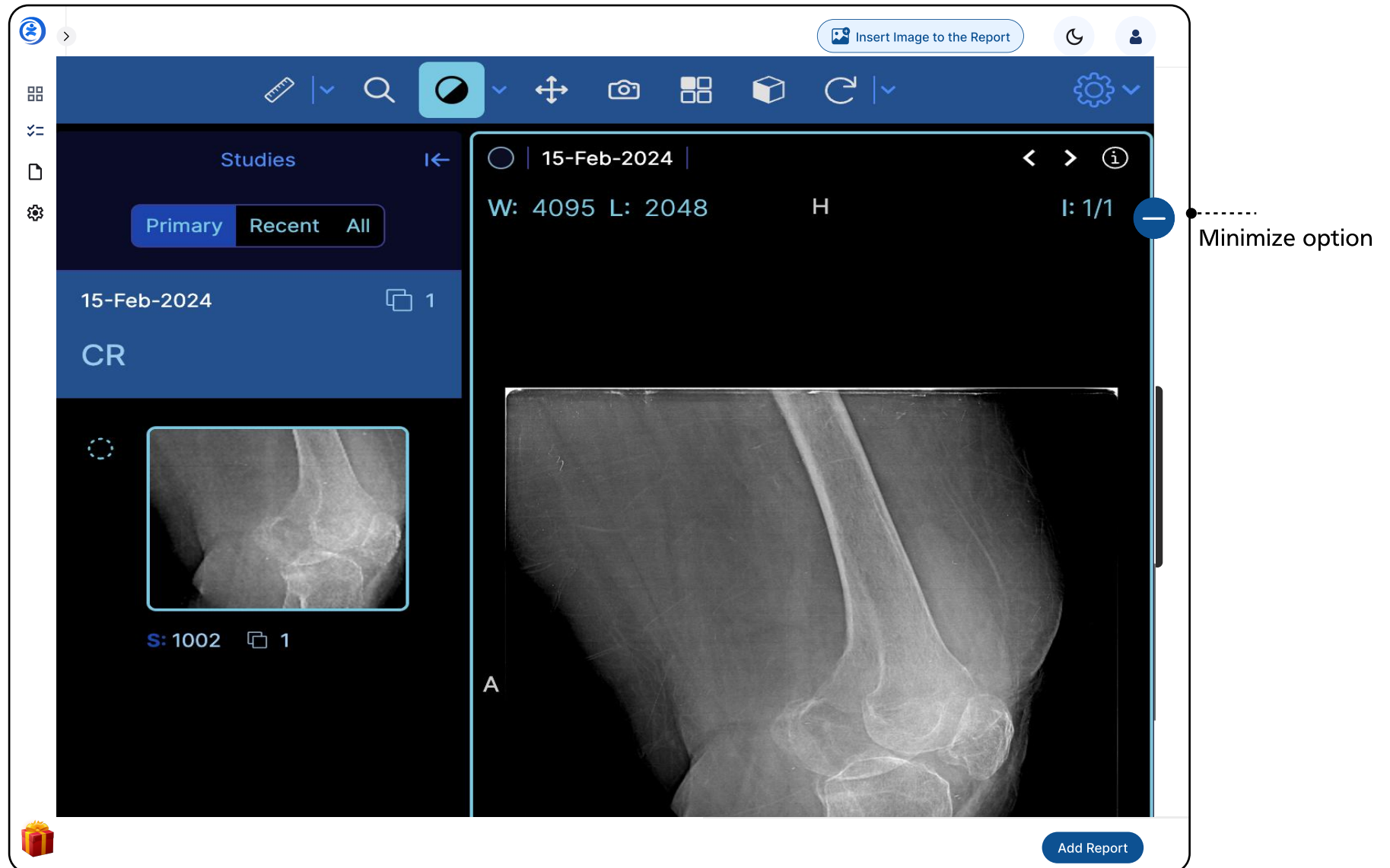


Invite your friend and get 10% on all their purchases

Invite

To decrease thr scroll now, tab option is there so that cognitive load can be decreased

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One more feature has been added that the DICOM which can be a split window can be Minimize and maximize according to the need

Brand Identity

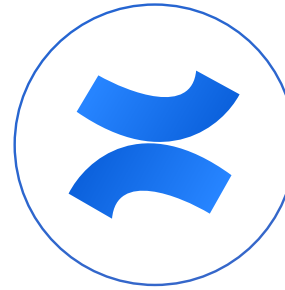
Logo Iterations

Final Concept

Logo Usage

Brand color and font





Final Concept



+ × =



+



=







Logo on Dark
Background

RADX
BRAND GUIDELINES



Logo on Light
Background

MAY
2024

Logo Usage

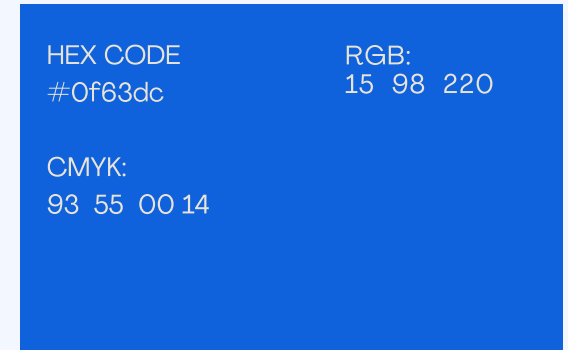
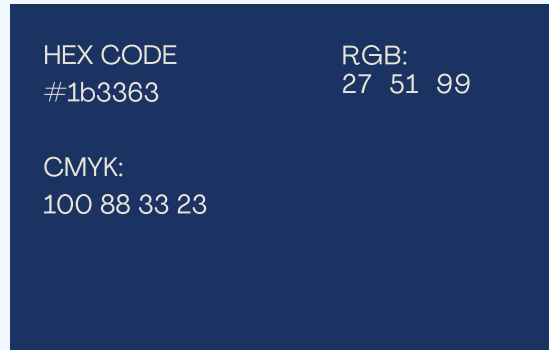
Sample Applications

A logo usage guideline is a document that outlines how to use a company's logo, including different versions of the logo and when to use them. Guidelines are an important part of a brand's strategy and style guide, and they help ensure that the logo is used consistently and properly.



Our Color Palette

Hex code, CMYK and RGB



Gradient color used -



NUNITO

abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ

A brown fox jumps over the lazy dog

A brown fox jumps over the lazy dog

Other Works

Osteocheck

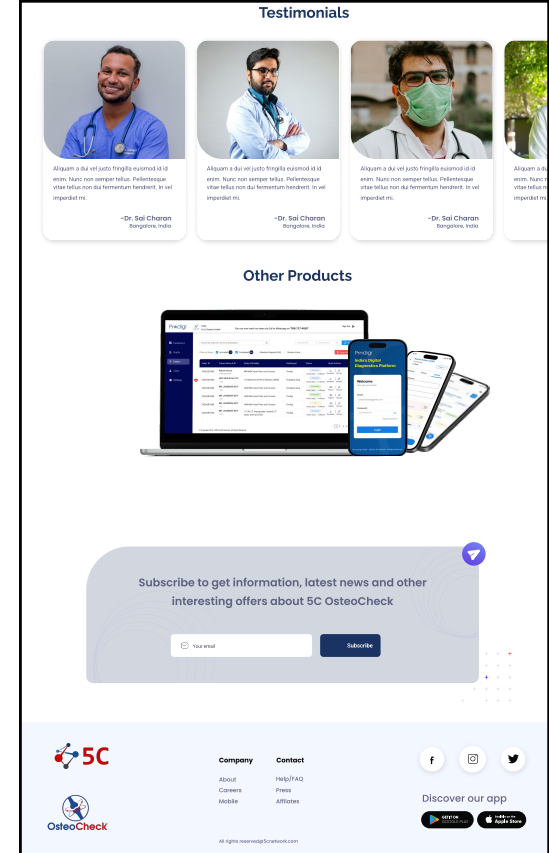
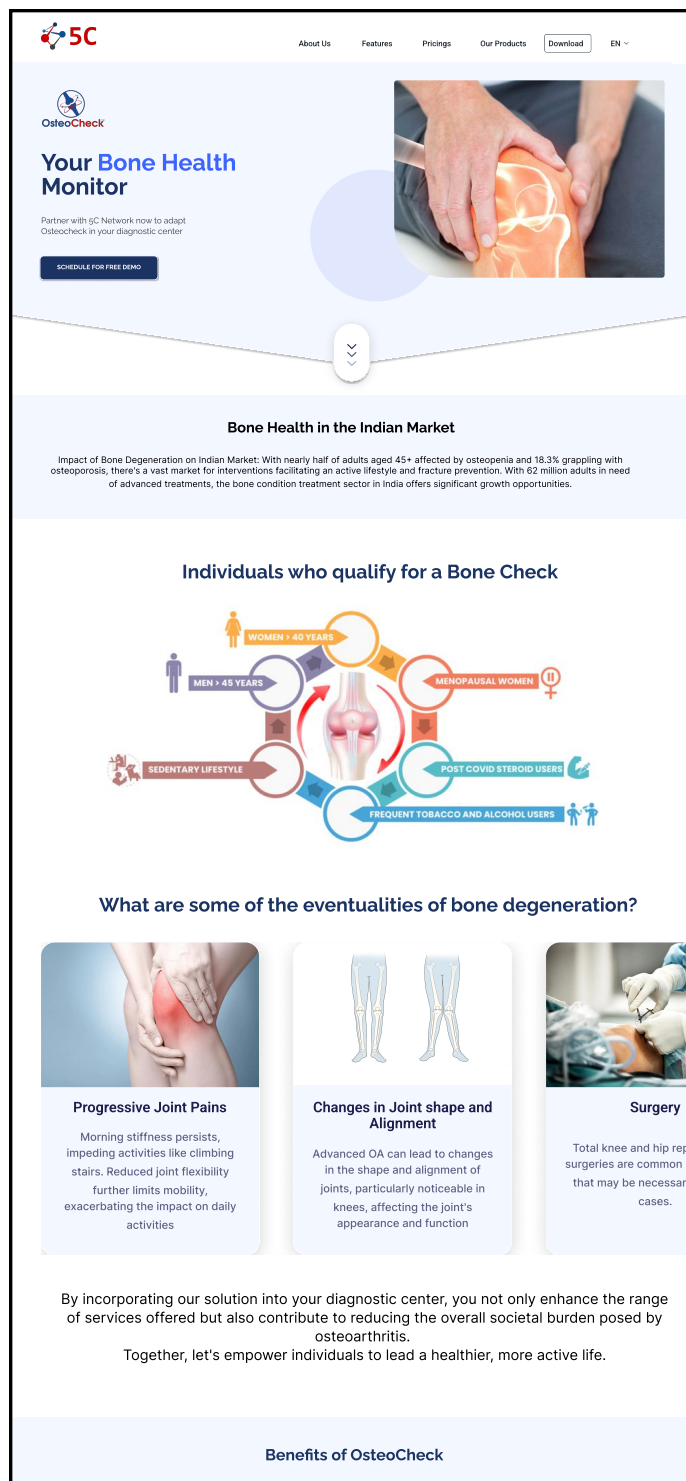
Bionic Inference Engine

Bionic Report

Bionic



OsteoCheck Landing Page



Bionic Inference Engine

Bionic

Sign in

Email

Enter your email

Password

Enter Your Password

Forgot Password?

☐ Remember Me

Sign in

Need Help? +91 9566915477

Cases

Search

Upload Report

PATIENT NAME	AGE, GENDER	DATE	SHARE	REPORT
Mahendra Singh	58 Years, Male	Mar 11 2024, 10:34		View
Jay Veer Singh	35 Years, Male	Mar 11 2024, 12:45		View
Kunal Mohita	68 Years, Female	Mar 12 2024, 12:45		View
Naveed Sharief	58 Years, Male	Mar 11 2024, 10:34		View
Anur Singh Chaudha	35 Years, Male	Mar 12 2024, 12:45		View
Kunal Sharma	68 Years, Male	Mar 11 2024, 14:45		View
Shreya Gupta	58 Years, Female	Mar 11 2024, 16:34		View
Chiranjay Jyoti	35 Years, Female	Mar 12 2024, 19:45		View
Suril Sharma	68 Years, Male	Mar 12 2024, 21:45		View

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Back

Copy the report

75% Contradictions

92% Spell-Check

76% Description

Patients Name	Report/Contradiction Report	Patient ID	32498832
Age/Gender	58	Gender	Male
Referring Doctor	Dr. Naveed Sharief	Date	4 Mar 2024

History:
Back Pain and both lower limbs weakness.
Technique:
T1W, T2W Sagittal T2W imm Coronal T1W, T2W axial T2W Sagittal Whole Spine Screening MR Myelogram.
Observations:
Straightening of Lumbosacral spine is seen.
Diffuse disc bulge causing mild anterior thecal sac indentation with no obvious neural foramina narrowing is visualized at L3-L4 and L5-S1 levels.
Diffuse disc bulge with central disc protrusion causing mild to moderate anterior thecal sac indentation and bilateral neural foramina narrowing with compression of exiting and traversing nerve roots at L4, T5 foraminal level. In the anterior neural foramina level is identified at T4, T5.

Contradictions

Some contradictions will be there

Some contradictions will be there

Some contradictions will be there

Some contradictions will be there

Spell-Check

Whole spine "Screening"

Straightening of "lumber"

Description

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Back

Upload Scans

Report

Upload Scans

3

Drag and Drop your Image or

Upload scans

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Back

Upload Scans

Report

Upload Scans

32498832.zip

1455.77 KB

Cancel Submit

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Back

Copy the report

75% Contradictions

92% Spell-Check

76% Description

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Key Images

Contradictions

Some contradictions will be there

Some contradictions will be there

Spell-Check

Whole spine "Screening"

Straightening of "lumber"

Description

Bionic Report

Bionic Report

Select modality from here

Voice typing for writing reports ...

Hey Doc, I am here to assist you on reporting
Please write down the pathologies

Stretched Patella - Femoral Liagment

Oedema

Add Pathology

Create AI Report
Copy
Clear

B I U S " " < /> | | | | | Normal + = T x

Observations :

Impressions :

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Bionic Report

Profile

Dr. Amit Shrivastava

Name
Dr. Amit Shrivastava

Email Id
amit_shivastava@gmail.com

Phone Number
+91 9844736489

Education
M.D In Radiology
M.B.B.S In Radiology
B.Sc in Radiology

Date of Birth
28 October 1978

Address
India Chowk, Rajpur Rd, Malsi,
Dehradun, Uttarakhand 248001

Save

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BIONIC

B

Bionic

Sign in

Email

Enter your email

Password

Enter Your Password

Forgot Password?

☐ Remember Me

Sign in

B

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Cases

Search

+ Upload Report

PATIENT NAME	AGE, GENDER	DATE	SHARE	REPORT
Mahendra Singh	56 Years, Male	Mar 11 2024, 10:34		View
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Kunal Sharma	68 Years, Male	Mar 12 2024, 12:45		View
Shreya Gupta	56 Years, Female	Mar 11 2024, 10:34		View
Chinnayal Iyer	35 Years, Female	Mar 12 2024, 12:45		View
Sunil Sharma	68 Years, Male	Mar 12 2024, 21:45		View

B

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Upload Scans

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Observations:

Straightening of lumbar spine is seen.

Key Images

B

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Back

Upload Scans

Report

Upload scans

B

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Back

Upload Scans

Report

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Key Images

B

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Back

Dr. Aditi Raj
Surgeon

Full Name

Dr. Aditi Raj

Email ID

applications@scnetwork.com

Phone Number

+91-9566915477

Hospital

Jeevan Hospital

References

1. <https://www.ramsoft.com/radiologist-shortage>
2. <https://rology.health/a-brief-history-of-teleradiology/>
3. https://www.researchgate.net/figure/Workflow-in-a-radiology-department-Adapted-from-Andrei-Leontiev-IHE-Integrating-the_fig1_277098297

