Project Report for Course:

DV1557- Usability and Interaction Design ANVÄNDBARHET OCH INTERAKTIONSDESIGN

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# **PASSPORTSEVA**

https://www.passportindia.gov.in/

**Evaluation Project** 

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## **ABSTRACT**

The main agenda of this report is to evaluate an interactive website. Passport seva is website which we have chosen to evaluate, this website deals with the services and any information regarding passport services. The Indians use this website where they can apply passport, renew their passport, book a slot for visas. Based on the Heuristic Principles we have evaluated the website and identified the drawbacks of User Interface design, as the website turns out to be a bad interactive system. Flaws identified can be improved by using Heuristic Principles and better suggestions are made to enhance User Interface Design.

## INTRODUCTION

The web page Passport Seva is an interactive website, where the functionality of this website is to provide passport services to the people. The passport services present in the website are new user registration - which helps the user to register as a new user, existing user login - which provides the facility to user to login into his personal account if already a registered user, appointment availability – user checks the available appointments, tracking application status – user can track the status of the application.

There are also other features provided by the website like contact information, passport offices location, information corner and latest updates. Here the user can apply for the passport by following the steps mentioned in the website. This website also provides the information like what are the required documents that should be submitted. There is also an information corner which says about Passport Act and rules, FAQs, Instruction booklet and Quick guides.

It also has a search bar which helps the user to search the required information. It is present at top left corner which is very hard to identify it. Although it satisfies some Heuristic principles but, the major principles are not satisfied by the website. In the website, the updates and notices are displayed where the user can know the latest news.

## **BACKGROUND**

The User Interface is an interaction between user and system. Here the User Interface takes the control over the system to allow effective functioning. User Interface is evaluated using several evaluation techniques to make the website more fruitful. We have chosen the Expert evaluation method, which is reviewed by two or more usability experts to assess the issues of the work flow.

Firstly, we have analyzed the website interface through a checklist where Heuristic evaluation identifies the usability problems and it is an inspection method for the User Interface design [1]. By using Heuristic principles, we had performed Heuristic evaluation. There are ten Heuristic principles which should be followed to design a good UI/UX design. Heuristic evaluation of an interactive system directly focuses on a specific issue/flaw. Optimal solutions can be produced by evaluators who help in evaluating the drawbacks of the website.

## PRIMARY GOALS

The main goal of the project is to select a suitable evaluation method to perform the Heuristic evaluation of an interactive system. By using the Heuristic principles, we can suggest a better way for designing a website based on User Interface and User Experience. Hence, it results in designing a user-friendly website.

#### **Key features**

- The website has a special feature to change the font size of the contents.
- We can also change the language according to the user's choice.
- The website provides the external links for external affairs, visa on arrivals and Bureau of Immigration.

## **EVALUATION METHODS**

#### **Expert evaluation**

However, the interactive systems are assessed for User Experience (UX) with many methods and tools. The interactive system we have chosen will be evaluated using expert evaluation [2]. The researchers have researched and studies about several UX evaluations methods, out of which expert-based evaluation method is the most relevant method for the assessment of UX.

Expert evaluation method can also evaluate difficult websites with special features and technical problems also. Expert evaluation is also a relative quick method to get website feedback, and also inexpensive as it does not need much time to evaluate and can use in-house resources. Here, the Expert-evaluation is carried out by using the Heuristic principles.

Here the expert evaluation follows some of the Heuristics or principles that is used by the reviewers implicitly. Instead, to identify the issues they will be depending on their expertise in UX. An expert evaluation can help to recognize on which things to focus.

Here are some steps that should be followed when expert evaluation is used to get an effective result.

- Use of multiple experts can help us in decreasing the number of issues quickly.
- Come up with the solutions.
- Prioritize what kind of issue we are going to deal with and focus on it.
- The issues can be numbered to identify them easily.

## TASK ANALYSIS

## Task 1: Apply for a Passport

- I. Click on New User Registration
  - 1. Select option to "Register to apply at"
  - 2. Select "Passport office"
  - 3. Fill in the "Given name"
  - 4. Fill in the "Surname"
  - 5. Select "Date of Birth"
  - 6. Fill in the "Email ID"
  - 7. Select Yes or No for "Login ID same as email ID"
  - 8. Fill in the "Login ID"
  - 9. Fill in the "Password"
  - 10. "Confirm Password"
  - 11. Select "Hint question"
  - 12. Fill in "Hint answer"
  - 13. Enter the "Characters displayed"
  - 14. Click on "Register" button
- II. Click on Existing User Login
  - 1. Enter "Login Id"
  - 2. Click on "Continue"
  - 3. Enter "Password"
  - 4. Click on "Login"
- III. Click on "Apply for fresh Passport/Re-issue of Passport"
  - 1. Select the "Ordinary Passport"
- IV. Fill in the required details in the form and submit
- V. Click the "Pay and Schedule Appointment" link
- VI. Print the Application Receipt
- VII. Visit the Passport seva Kendra/Regional Passport Office

## Task 2: To Check Appointment Availability

- I. Click on "Check Appointment Availability"
- II. Select the "Passport Office"
- III. Enter the "Character Displayed"
- IV. Click on "Check Appointment Availability" button

## **Task 3: To Track Application Status**

- I. Click on "Track Application Status"
- II. Select the "Application Type"
- III. Fill in the "Number"
- IV. Select the "Date of Birth"
- V. Click on "Track Status"

## **Evaluation Criteria**

Usability inspection method is also known as heuristic evaluation where the computer software helps us to identify the drawbacks of the User Interface Design. Usability heuristic is most widely used principles for user interface design. We have used Heuristic Principles as they are practical and also the fastest way to solve the problems or errors.

## **Heuristic Principles:**

There are 10 heuristic principles we have used in the evaluation process of interactive system [3].

#### **Visibility of system status:**

The principle "Visibility of system status" states that, the user should be prior informed or should know the appropriate feedback from the system of what is the current status of the interactive system within the sensible time. It builds the trust and provides the continuous information to the user, so that the system gives the feedback as quick as possible.

## Match between system and the real world:

This principle "Match between system and the real world" states that, the interactive system that is designed should be user-friendly language which in other words means the user should be able to understand the meaning without having to look up the word's meaning.

#### User control and freedom:

This principle states if the user often makes faults by performing their actions, the user should have a control over the interactive system to perform any action or process without going through any extended action. The users should also have freedom of undo and redo options.

#### **Consistency and Standards:**

This principle states that the interactive system should maintain particular standards to avoid the user's cognitive load. Regardless of which platform the designers use should maintain the consistency of the standards.

#### **Error Prevention:**

This principle states that the system designed should eliminate the error conditions and also prevent users to commit actions. The users should be warned if they perform any kind of actions which affect to the interactive system and provide the solution to it.

## Recognition rather than recall:

This principle states that it minimizes the user's memory load by showing options actions and options available to the user. It avoids remembering of the information in the user's perspective way.

## Flexibility and efficiency of use:

This principle states that it provides the flexibility to the user like displaying the shortcuts to speed up the process of which user want to do. It helps to design the interactive system that understand to both experience and inexperience users.

## Aesthetic and minimalist design:

This principle states that the interactive system should not contain any unnecessary elements as there should only be necessary content and features or information. If there are any unnecessary elements the users will get distracted and the design will also look messier.

## Help users recognize, diagnose and recover from errors:

The principle "help users recognize, diagnose and recover from errors" states that the users should be indicated with error message (like bold, popup message, red text). There should also be shortcut solutions to the errors made by the users.

## Help and documentation:

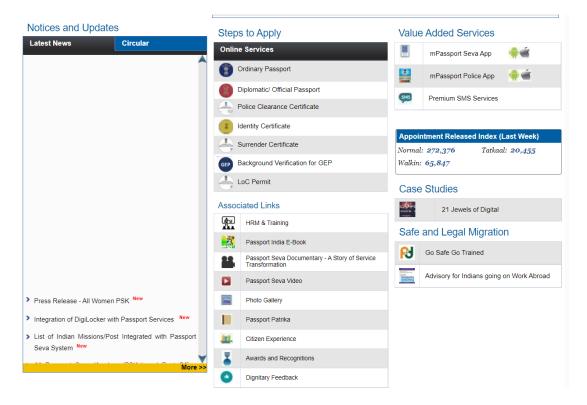
This principle states that system should provide documentation that makes user easy to search and focus on their task that is to be done. Documentation provides the steps to be carried out.

## PROBLEMS IDENTIFIED

Here the problems or flaws that are identified in the website are discussed using the Heuristic principles.

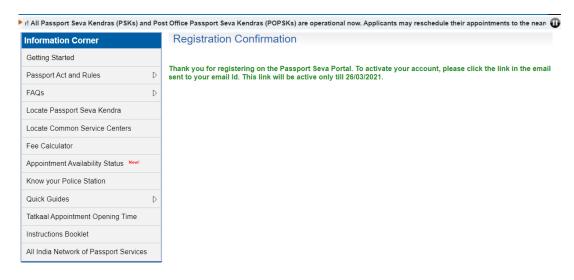
## **Consistency and Standards:**

As we have discussed this Heuristic principle, this website does not follow some standards that need to be followed to design an interactive system. The website does not have consistency, as there is unwanted information like scroll bar, multiple ads.



## User control and freedom:

As discussed, this principle in the above section, this website does not provide freedom to the user and while using this website users are not given control on it. The user cannot go back or change any information regarding his personal data after the registration process.



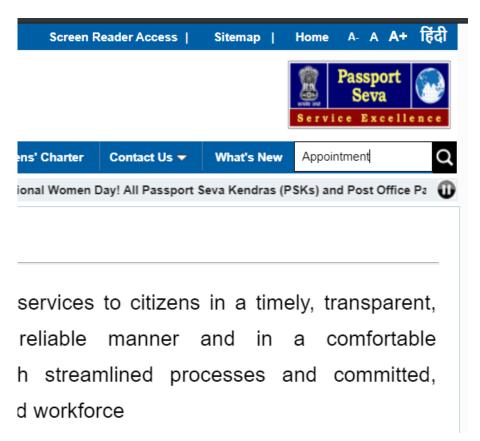
This shows the registration process where we cannot change the personal information after registration.

#### **User Registration** Important Information: Passport application can be processed at any Fields marked with asterisk (\*) are mandatory PSK/POPSK/PSLK WITHIN INDIA irrespective of your residential address. . Click here to check the appointment availability at all PSK/POPSK/PSLK. Click here to know more about Apply Anywhere in India scheme for Passport Services. Register to apply at\* O CPV Delhi Select the 'CPV Delhi' option to apply for Diplomatic/Official passport at Consular, Passport and Visa (CPV) division, Delhi. Passport Office Tibetan Refugees applying for Identity Certificate must register with 'Delhi' Passport Office. Passport Office \* Hyderabad (As per Present Residential Address) First Name + Middle Name Initials and honorifics (e.g. Dr.,Col.,etc.) are not allowed. Given Name (Max 45 Characters)\* Hero Vilan Surname (Max 45 Characters) Date of Birth (DD/MM/YYYY)\* 18/03/2021 E-mail Id (Max 35 Characters)\* premchand.naidu06@gmail.co Do you want your Login Id Yes ○ No to be same as E-mail Id? Login Id\* premchand.naidu06@gmail.ci Check Availability ••••• Password must have at least one digit (0-9), one lowercase character (a-z) or one Password\* Password Policy uppercase character(A-Z). It can have minimum 8 characters and maximum 14 characters. Password must have at least one digit (0-9), one lowercase character (a-z) or one uppercase character(A-Z). It can have minimum 8 characters and maximum 14 Confirm Password\* characters. Hint Question\* Birth City Hint Answer\* ••••• Enter Characters Displayed \*

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#### **Recognition rather than recall:**

As this principle is discussed in the above section, this website does not show any search suggestion when the user wants to search anything that is needed. Therefore, it increases the memory load of the user. It does not even show the actions and required options when the user need to retrieve information quickly.



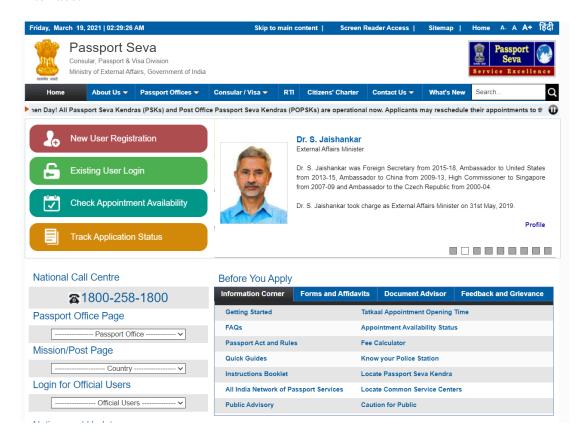
## Flexibility and efficiency of use:

This website does not provide flexibility to the user's, as there are no shortcuts like keyboard shortcuts and touch gestures to influence the user to use this website. This website does not allow customizations where the user cannot make any changes, and book an appointment according to his convenience. Hence, efficiency of the website is decreased.

## Aesthetic and minimalist design:

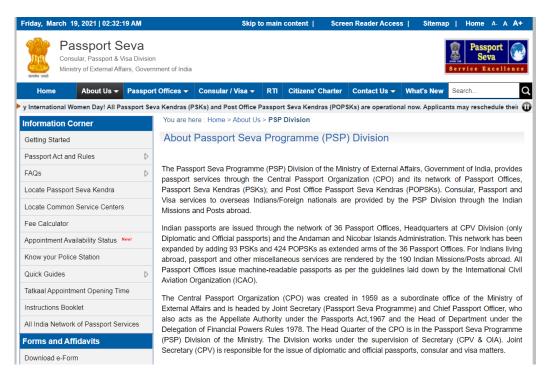
The website we have chosen does not follow this principle. It does not contain minimalistic design where the website has popping colors, more pictures and unwanted information. The website looks clumsy and messier.

The website is not eye catchy as there is more text information rather than good User Interface.



## **Help and Documentation:**

This website does not provide wanted information rather it provides unwanted information which is not necessary for the user. It does not even provide the correct steps that should be followed by the user to complete his task.



## Suggestions to the new version

Suggestions to be followed to make a better version of the website:

- 1) By following good website standards which increases the consistency of the website.
- 2) By providing a chat box that helps the user to have a quick response regarding any queries.
- 3) By introducing undo and redo options in the website, the website achieves the user control and freedom Heuristic principle.
- 4) The website can also provide the search suggestion to increase its efficiency.
- 5) By decreasing the text information, the website can be made more Aesthetic.
- 6) By removing the unwanted information like pictures helps to achieve the principle minimalistic design.
- 7) By introducing quick guides, steps to follow will help the user to complete his task within no time.
- 8) By making the User Interface good, results in designing a website as a User-friendly one.

## **SUMMARY AND DISCUSSION**

This report presents the evaluation of an interactive website named passportseva.gov.in (<a href="http://www.passportseva.gov.in">http://www.passportseva.gov.in</a>), the evaluation process which we have chosen is expert evaluation method which is also known as inspection method and we have also used Heuristic principles to get the best possible outcomes and conclude whether the website is good or bad, User Interface and User Experience plays an important role in this evaluation process.

As there are many numbers of flaws in the design, we can change it using heuristic principles for better UI/UX design. Even though the website, passport seva does not follow some of the Heuristic principle, by adding some of the features or by removing unwanted information and ads in the website can make the interactive system much more aesthetic.

During this evaluation we have found many flaws and inconsistencies in the website and suggested improvements for the website using Heuristic principles.

## References

## http://www.passportseva.gov.in

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- [2] K. Väänänen-Vainio-Mattila and M. Wäljas, "Developing an expert evaluation method for user eXperience of cross-platform web services," in *Proceedings of the 13th International MindTrek Conference: Everyday Life in the Ubiquitous Era*, New York, NY, USA, Sep. 2009, pp. 162–169, doi: 10.1145/1621841.1621871.
- [3] J. Nielsen, "10 usability heuristics for user interface design," *Nielsen Norman Group*, vol. 1, no. 1, 1995.

## **Appendix**

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