Assignment4 Heuristic Evaluation

- I used the "https://www.irctc.co.in/nget/" for the heuristic evaluation.
- The website is designed to help the users in booking tickets for their travel from one place to another.
- The website also provided options for booking necessary accommodation at the destination and possible tour plans available at the destination.
- The website has a user profile page which helps the user to track all the previous activities.

Problems pertaining to the website:

1. The website is not designed efficiently.
2. Even though the website supports multiple functionalities, the functionalities are not properly organized and are not user friendly.
3. The website does not have a master navigation and the homepage does not serve the basic purpose of the website.
4. The website can be made more clear and efficient to increase the user satisfaction.

Improvements:

1. The website should have a master navigation which helps the user to access the required features in the website.
2. The home page can be designed efficiently and should contain all the important features.
3. A search engine can be added to the website to help the user in searching for the necessary functionality.

Evaluation for the improvements proposed:

1. A user study can be conducted before and after the improvements have been implemented to check the user satisfaction.
2. A questionnaire can be circulated among the existing users to identity the problems faced by the user while using the website and tally them with the proposed improvements.

Heutistic Review Template (Source: http://www.uxforthemasses.com/)

IRCTC   Score   Comments

Hover over a guideline for more information, examples of good practice and importance to the overall user experience.

N/A = not applicable or can't be assessed

Provide a short rational for the score, such as a description of the issues found; examples of good practice and the likely impact for users.

Features & functionality

#	Guideline	Score	Comments
1	Features and functionality meet common user goals and objectives.	**Good**	*The website is clumsy and user takes a long time to fulfill his goal or purpose on the website.*
2	Features and functionality support users desired workflows.	**Moderate**	*The website is inefficient and takes a long time to find the desired funtionalities.*
3	Frequently-used tasks are readily available (e.g. easily accessible from the homepage) and well supported (e.g. short cuts are available).	**Very poor**	*There is no master navigation.*
4	Users are adequately supported according to their level of expertise (e.g. short cuts for expert users, help and instructions for novice users).	**Very poor**	*The website doesnot have any such options to support the user expertise. A lot of basic functions are not properly displayed for the user to access.*
5	Call to actions (e.g. register, add to basket, submit) are clear, well labelled and appear clickable.	**Poor**	*The login portal is not at all visible for the use to access. Even when the user is logged in, there is no option to show the user that he is logged in.*

Homepage / starting page

#	Guideline	Score	Comments
6	The Homepage / starting page provides a clear snapshot and overview of the content, features and functionality available.	**Poor**	*The portal only has one important feature i.e booking train tickets very clearly. But there are other features that the website supports which are not managed efficiently.*

| 7 | The home page / starting page is effective in orienting and directing users to their desired information and tasks. | **Very poor** | *Inefficient management of the home page. Master navigation missing and is hidden to the side of the page.* |

| 8 | The homepage / starting page layout is clear and uncluttered with sufficient 'white space'. | **Poor** | *There is lot of white space but the UI is clumsy and cluttered.* |

Navigation

| 9 | Users can easily access the site or application (e.g. the URL is predictable and is returned by search engines). | **Excellent** | *Since the website is the basic website which supports the railway bookings is India, the URL is predictable.* |

| 10 | The navigational scheme (e.g. menu) is easy to find, intuitive and consistent. | **Very poor** | *Clumsy and cluttered.* |

| 11 | The navigation has sufficient flexibility to allow users to navigate by their desired means (e.g. searching, browse by type, browse by name, most recent etc…). | **Poor** | *All the features are present but the navigation is not visible for the users to use it. The master navigation is hidden to the slide of the home page making it difficult for the user to identity.* |

| 12 | The site or application structure is clear, easily understood and addresses common user goals. | **Poor** | *Only one functionality is clearly understood. Rest all other functionalities need to be improvised.* |

| 13 | Links are clear, descriptive and and well labelled. | **Good** | *All the links are labelled and clear to understand.* |

| 14 | Browser standard functions (e.g. 'back', 'forward', 'bookmark') are supported. | **Good** | *Browser functions are supported.* |

| 15 | The current location is clearly indicated (e.g. breadcrumb, highlighted menu item). | **Good** | *Since the website is a booking application, user select the desired location.* |

16	Users can easily get back to the homepage or a relevant start point.	**Excellent**	
17	A clear and well structure site map or index is provided (where necessary).	**Very poor**	*There is no site map for the website in the first place. A well designed site map would increase the efficiency of the website.*

Search

18	A consitent, easy to find and easy to use search function is available throughout (where desirable).	**Very poor**	*There is no search function available throughtout the website.*
19	The search interface is appropriate to meet user goals (e.g. multi-parameter, prioritised results, filtering search results).	**Very poor**	*No search functions implemented for the entire website.*
20	The search facility deals well with common searchs (e.g. showing most popular results), misspellings and abbreviations.	**Very poor**	*No search functions implemented for the entire website.*
21	Search results are relevant, comprehensive, precise, and well displayed.	**Very poor**	*No search functions implemented for the entire website.*

Control & feedback

22	Prompt and appropriate feedback is given (e.g. following a successful or unsuccessful action).	**Good**	*There is an interactive bot which helps and gives response to all the questions asked by the users.*
23	Users can easily undo, go back and change or cancel actions; or are at least given the chance to confirm an action before commiting (e.g. before placing an order).	**Good**	*The website gives the user to confirm his options before processing them. But the website act time is very less. The website gets timed out very quickly.*

| 24 | Users can easily give feedback (e.g. via email or an online feedback / contact us form). | **Excellent** | *The website helps the user to contact them and give feedback to all their questions and doubts regarding the functionalities the website supports.* |

Forms

25	Complex forms and processes are broken up into readily understood steps and sections. Where a process is used a progress indicator is present with clear numbers or named stages.	**Good**	*There is no progress indicator but the processes are broken down into small tasks making it easy for the user in using the website.*
26	A minimal amount of information is requested and where required justification is given for asking for information (e.g. date of birth, telephone number).	**Good**	*The website only requests the neccessary informations and makes the tasks easy for the user. The website also gives the user to save the information and use it for further processes.*
27	Required and optional form fields are clearly indicated.	**Excellent**	*The options are indicated and reasons are clearly stated for the fields which are compulsory to be filled.*
28	Appropriate input fields (e.g. calendar for date selection, drop down for selection) are used and required formats are indicated.	**Excellent**	*Since the website is a booking website, the dates and their respective formats are clearly stated and used. The user can easily select the required day and date.*
29	Help and instructions (e.g. examples, information required) are provided where necessary.	**Moderate**	*No particular help is provided. But the website is self sufficient for the user to complete the expected functionalities.*

Errors

| 30 | Errors are clear, easily identifiable and appear in appropriate location (e.g. adjacent to data entry field, adjacent to form, etc.). | **Excellent** | *The errors are clearly visible for the user to understand the missing aspects to fulfill the expected task.* |
| 31 | Error messages are concise, written in easy to understand language and describe what's occurred and what action is necessary. | **Excellent** | *Errors are clearly stated.* |

32	Common user errors (e.g. missing fields, invalid formats, invalid selections) have been taken into consideration and where possible prevented.	**Excellent**	
33	Users are able to easily recover (i.e. not have to start again) from errors.	**Moderate**	*Sometimes the error get misplaced because the website gets timed out very quickly.*

Content & text

34	Content available (e.g. text, images, video) is appropriate and sufficiently relevant, and detailed to meet user goals.	**Good**	*The content is not clearly organized in the website.*
35	Links to other useful and relevant content (e.g. related pages or external websites) are available and shown in context.	**Good**	*The links are clearly present and pass them to next link depending upon the necessity of the user request.*
36	Language, terminology and tone used is appropriate and readily understood by the target audience.	**Excellent**	*The language is clear and up to the point for the user to understand and fulfil his expected functionalities.*
37	Terms, language and tone used are consitent (e.g. the same term is used throughout).	**Excellent**	
38	Text and content is legible and scanable, with good typography and visual contrast.	**Excellent**	

Help

39	Online help is provided and is suitable for the user base (e.g. is written in easy to understand langugage and only uses recognised terms). Where appropriate contextual help is provided.	**Good**	*Help is provided where ever there is a need for it.*

40	Online help is concise, easy to read and written in easy to understand language.	**Good**	
41	Accessing online help does not impede users (i.e. they can can resume work where they left off after accessing help).	**Moderate**	*The website keeps refreshing again and again. So its inefficient.*
42	Users can easily get further help (e.g. telephone or email address).	**Excellent**	*The feedback is*

Performance

43	Site or application performance doesn't inhibit the user experience (e.g. slow page downloads, long delays).	**Poor**	*The response time of the website is very long.*
44	Errors and reliabilty issues don't inhibit the user experience.	**Moderate**	
45	Possible user configurations (e.g. browsers, resolutions, computer specs) are supported.	**Poor**	*The interfere is not compatible with various browsers.*

Overall usability score (out of 100) *	**63**	-	**Moderate**

* Very poor (less than 29) - Users are likely to experience very significant difficulties using this site or system and might not be able to complete a significant number of important tasks.

* Poor (between 29 and 49) - Users are likely to experience some difficulties using this site or system and might not be able to complete some important tasks.

* Moderate (between 49 and 69) - Users should be able to use this site or system and complete most important tasks, however the user experience could be significantly improved.

* Good (between 69 and 89) - Users should be able to use this site or system with relative ease and should be able to complete the vast majority of important tasks.

* Excellent (more than 89) - This site or system provides an excellent user experience for users. Users should be able to complete all important tasks on the site or system.

Usability guidelines

Features & functionality

1	**Features and functionality meet common user goals and objectives** Key and common user goals and objectives (e.g. carry out some transaction, find some information, carry out some research etc…) should have been identified and addressed. Ideally the site or application should allow users to meet all of their key goals and objectives.	**Very high**
2	**Features and functionality support users desired workflows** The site or application should support or at least be compatible with the way that users wish to work. For example, users might want to be able to carry out bulk transactions or be able to save and return to their work.	**Very high**
3	**Frequently-used tasks are readily available (e.g. easily accessible from the homepage) and well supported** For example short cuts and a login to retrieve details might be provided to speed up the completion of frequently carried out tasks.	**High**
4	**Users are adequately supported according to their level of expertise** For example, novice users are given help and instructions and features are progressively disclosed (e.g. advanced features not being shown by default).	**Medium**
5	**Calls to action (e.g. register, add to basket, submit) are clear, well labelled and appear clickable** Possible actions should always be clear and the primary call to action (i.e. the most common or desirable user action) should stand out on the page or screen.	**Medium**

Homepage / starting page

6	**The Homepage / starting page provides a clear snapshot and overview of the content, features and functionality available** For example, an introduction and overview of the site is provided together with section snapshots and example content.	**Medium**
7	**The homepage / starting page is effective in orienting and directing users to their desired information and tasks** Users should be able to work out where they need to go to complete a given task (e.g. carry out some research, complete a transaction).	**High**
8	**The homepage / starting page layout is clear and uncluttered with sufficient 'white space'** Users should be able to quickly scan the homepage and make sense of both the content available and of how the site is structured.	**Medium**

Navigation

9	**Users can easily access the site or application** For example, the URL is predictable and is returned by search engines. If a user attempts to find the site via a search engine, it should ideally be returned on the first page of search results for likely queries.	**Low**
10	**The navigational scheme is easy to find, intuitive and consistent** Users should be able to very easily locate and use the navigational scheme (e.g. left hand menu, top menu, tabbed menu), and it should not be significantly different across the site or application (unless a decision has been made to specifically differentiate a given section or area).	**High**
11	**The navigation has sufficient flexibility to allow users to navigate by their desired means** For example a user might want to be able to search for an item or browse by size, name or type. Although not all user preferences can or indeed should be addressed, the most useful and common navigational means should be supported.	**Medium**
12	**The site or application structure is clear, easily understood and addresses common user goals** For example, gathering information, submitting data, carrying out research. Users should be able to work out where they need to go to carry out common user goals and be able to quickly gain an understanding of how the site or application is structured.	**Very high**
13	**Links are clear, descriptive and well labelled** Links should be clearly 'clickable' (e.g. underlined or colourised) and it should be clear to users where any given link goes to. Non-descriptive links such as 'click here' should be avoided and any links going to an external website or opening a new window should be identified as such.	**Medium**
14	**Browser standard functions (e.g. 'back', 'forward', 'bookmark') are supported** Users should be able to bookmark a page (or be presented with a URL to use) and go back and forth without breaking the site or losing any information they have entered.	**High**
15	**The current location is clearly indicated (e.g. breadcrumb, highlighted menu item)** Users should always know where they are in the site or application.	**Low**
16	**Users can easily get back to the homepage or a relevant start point** For example, a homepage link might be part of the breadcrumb or a home link might be available as part of the header.	**Low**
17	**A clear and well structure site map or index is provided (where necessary)** The sitemap might be part of the header or footer and should ideally be available from every page on the site.	**Very low**

Search

18	**A consistent, easy to find and easy to use search function is available throughout** The search function (where required) should be directly available from most pages on the site or application and should be consistently positioned (e.g. top left, top right or top centre).	**High**

19	**The search interface is appropriate to meet user goals** For example users are able to filter search results, an advanced search is available (if necessary) and common search conventions such as quotation marks (") and natural language searches are handled.	**High**
20	**The search facility deals well with common searches, misspellings and abbreviations** Ideally synonyms (e.g. 'coat' should also match 'jacket') should mean that logical and appropriate search results are returned for common user queries. Popular search results (e.g. top matches) should also be identified for common queries.	**Low**
21	**Search results are relevant, comprehensive, precise, and well displayed** It should be easy for users to see what has been returned, to work out why something has been returned and to determine how many results there are.	**High**

Control & feedback

22	**Prompt and appropriate feedback is given** For example, a confirmation message is shown following a successful transaction, input errors are promptly highlighted and it's made clear to users when a page has been updated.	**High**
23	**Users can easily undo, go back and change, or cancel actions** If an action can not be undo then users should at least be given the chance to confirm an action before committing (e.g. before placing an order). For example, users can return to a step and change their options or dynamically change a value without having to start again. Where an action can't be undone (e.g. a deletion), this should be made clear to users.	**Medium**
24	**Users can easily give feedback** For example, via email or an online feedback / contact us form. There should be an indication of how long users can expect to wait for a response if a query has been made.	**Very low**

Forms

25	**Complex forms and processes are broken up into readily understood steps and sections** For example, a checkout process might be broken up in to 'address', 'delivery options', 'payment' and 'confirmation'. Where a process is used a progress indicator is present with clear numbers or named stages.	**Medium**
26	**A minimal amount of information is requested and where necessary justification is given for asking for information** For example a site might outline that a telephone number is required in case there is an issue with a transaction. Users shouldn't be asked for extraneous information and where possible information should be auto populated (e.g. postcode lookup, code lookup) to keep input to a minimum.	**Low**

27	**Required and optional form fields are clearly indicated (e.g. using text or '*')** Where most fields are required the optional fields should be identified and when most fields are optional the required fields should be identified.	**Low**
28	**Appropriate input fields are used and required formats are indicated** Appropriate input fields might include calendar for date selection, drop downs for selection and radio button for small selections. Text might be used to indicate the required format or an example might be provided. Field lengths should correspond to the expected input so for example an email input field should be long, where as an initials input field should be very short.	**Medium**
29	**Help and instructions (e.g. examples, information required) are provided where necessary** Where input is non trivial or is likely to require some explanation this should be provided. Where a-lot of explanation is necessary a link to a page outlining what is required should be provided.	**Medium**

Errors

30	**Errors are clear, easily identified and appear in appropriate locations** Errors should be immediately apparent to users and ideally be located close to the offending input or function (e.g. adjacent to an input entry field). Inputs causing an error should be highlighted, together with an explanation for the error.	**High**
31	**Error messages are concise, written in easy to understand language and describe what's occurred and what action is necessary** Errors should avoid using very technical terms or jargon and should be written from the user's perspective.	**Medium**
32	**Common user errors have been taken into consideration and where possible prevented** Common user errors might be missing fields, invalid formats and invalid selections. For example, fields might limit input to particular a format (e.g. numbers only) or only become available once certain criteria have been met. JavaScript might also be utilised to provide immediate feedback for common formatting errors or errors caused by missing fields.	**Medium**
33	**Users are able to easily recover (i.e. not have to start again) from errors** For example, users might be able to re-edit and resubmit a form or enter a different value.	**Medium**

Content & text

34	**Content available (e.g. text, images, video, audio) is appropriate and sufficiently relevant, and detailed to meet user goals** Content should also be appropriately formatted, so for example videos and audio should be directly playable (i.e. shouldn't need to be downloaded to be played) and images should be of a sufficient quality.	**Very high**
35	**Links to other useful and relevant content (e.g. related pages, external websites or documents) are available and shown in context** For example there might be links from an article to related articles, related content or related external websites.	**Low**

36	**Language, terminology and tone used is appropriate and readily understood by the target audience** Jargon should be kept to a minimum and plain language should be used where ever possible.	**High**
37	**Terms, language and tone used are consistent (e.g. the same term is used throughout)** Capitalisation (e.g. 'Main title'; 'Main Title'; 'MAIN TITLE') and grammar should be consistent, together with the use of formal or informal terms (e.g. could not vs couldn't; what's vs what is etc...).	**Medium**
38	**Text and content is legible and scanable, with good typography and visual contrast** Users should be able to quickly scan headers and body text, in order to get an overview of what's available.	**Medium**

Help

39	**Online help is provided and is suitable for the user base** Help should be written in easy to understand language and only uses recognised terms. Users should be able to easily find and access help and where appropriate contextual help should be available, such as help for a specific page, feature or process.	**High**
40	**Online help is concise, easy to read and written in easy to understand language** Help should cover the essentials without providing excessive detail and shouldn't use jargon or technical terminology that isn't likely to be understood by users.	**Medium**
41	**Accessing online help does not impede users** Users should be able to resume work where they left off after accessing help. Ideally help should be available directly on a page or using a new window. If help is provided in the form of a document, it should be formatted for the web (e.g. PDF, rather than a Word document).	**Medium**
42	**Users can easily get further help (e.g. telephone or email address)** If a telephone help number is provided the hours of operation should be shown. If an email address or online form is provided, an indication should be given of how long a response is likely to take (e.g. within the next 24 hrs).	**Low**

Performance

43	**Site or application performance doesn't inhibit the user experience (e.g. slow page downloads, long delays)** Web page downloads shouldn't take longer than 5 seconds and on page interactions (e.g. using an application or AJAX functionality) shouldn't take any longer than 1 second to respond. Interactions taking longer than 1 second to respond should provide suitable feedback to show that something is taking place (e.g. an hour glass or swirling graphic).	**High**
44	**Errors and reliability issues don't inhibit the user experience** Sites and applications should be free of bugs and shouldn't have any broken links.	**Medium**

45	**Possible user configurations (e.g. browsers, resolutions, computer specs) are supported** Websites should be usable at a 800x600 screen resolution and should work with the most common browsers (IE, Firefox, Opera, Chrome etc…). Applications should be usable with common computer specifications (operation system, memory, available disk space) and screen resolutions (e.g. 800x600, 1025x768).	**Medium**

Rating below	Rating	Rating ranges		
0				
1	Very Poor	less than	29	
29	Poor	between	29 and	49
49	Moderate	between	49 and	69
69	Good	between	69 and	89
89	Excellent	more than	89	

	Rating	Rating ranges		
	Very Poor	less than	29	
	Poor	between	29 and	49
	Moderate	between	49 and	69
	Good	between	69 and	89
	Excellent	more than	89	