**Accesibility Issues - Quality Assurance of Predictive Modelling course**

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| **WCAG Guidline** | **Page & Examples** | **Fix** | **Actioned by** |
| 1.4.3 Contrast (Minimum) (Level AA)  Text and images of text have a contrast ratio of at least 4.5:1.  Large text - at least 18 point (typically 24px) or 14 point (typically 18.66px) and bold - has a contrast ratio of at least 3:1. | Main page & All Modules Page   * Contrast error in footer with background colour and copyright text   Fundamentals of Predictive Modelling   * 32 contrast errors on links, question/answer text and left menu selected highlight   Rules of Thumb   * 18 contrast errors on links, question/answer text and left menu selected highlight   Ethical Applications   * 28 contrast errors on links, question/answer text and left menu selected highlight   Avoiding Statistical Bias   * 13 contrast errors on links, question/answer text and left menu selected highlight   Model Interpretability   * 12 contrast errors on links, question/answer text and left menu selected highlight | Increase the contrast between the foreground (text) color and the background color. Large text (larger than 18 point or 14 point bold) does not require as much contrast as smaller text. |  |
| 2.4.4 Link Purpose (In Context)  (Level A)  The purpose of each link (or form image button or image map hotspot) can be determined from the link text alone, or from the link text and its context (e.g., surrounding text, list item, previous heading, or table headers).  Links (or form image buttons) with the same text that go to different locations are readily distinguishable. | All Modules Page   * Empty links in module link tree.   Rules of Thumb   * Redundant link - Adjacent links go to the same URL. 5.1.2 original paper link | Add tabindex=0 to remove from accessibility tree  If possible, combine the redundant links into one link and remove any redundant text or alternative text (for example, if a product image and product name are in the same link, the image can usually be given alt=""). |  |
| Advisory - 1.3.1 Info and Relationships  (Level A), 1.3.2 Meaningful Sequence  (Level A) | Main page & All Modules Page   * A layout table is present in module link tree | In almost every case, layout tables can be replaced with other HTML elements and styled with CSS to achieve the desired visual presentation. If the table contains tabular data, provide appropriate header (<th>) cells. If the layout table remains, verify that the reading and navigation order of table content (based on underlying source code order) is logical and give it role="presentation" to ensure it is not identified as a table to screen reader users. |  |
| 3.1.1 Language of Page (Level A)  The language of the page is identified using the HTML lang attribute (e.g., <html lang="en">). | Fundamentals of Predictive Modelling, Rules of Thumb, Ethical Applications, Avoiding Statistical Bias   * Language missing or invalid | Identify the document language using the <html lang> attribute with a valid value (e.g., <html lang="en">). Ensure that all lang attribute values are valid. |  |
| * + 1. Non-text Content (Level A)   Images, form image buttons, and image map hot spots have appropriate, equivalent alternative text.  Images that do not convey content, are decorative, or contain content that is already conveyed in text are given empty alternative text (alt="") or implemented as CSS backgrounds. All linked images have descriptive alternative text.  Equivalent alternatives to complex images are provided in context or on a separate linked page.  Form buttons have a descriptive value.  Form inputs have associated text labels.  Embedded multimedia is identified via accessible text.  Frames and iframes are appropriately titled. | Fundamentals of Predictive Modelling   * 18 x Redundant alternative text:-Figures 1.1 – 1.16, 1.18, 1.19 * 19 x long Alt text:- Figures 1.1 – 1.19   Rules of Thumb   * 8 x Redundant alternative text - . Text is same as text in paragraph under image – figure 2.1, 2.1, 2.3, 2.5, 2.7, 2.9, 2.11 * 10 x long Alt text figure 2.1 – 2.8, 2.10, 2.11 * Nearby image has same alt text – figure 2.9   Ethical Applications   * 8 x Redundant alternative text - . Text is same as text in paragraph under image – figure 3.2 - 3.8, 3.11 * 15 x long Alt text – figure 3.1 – 3.15   Avoiding Statistical Bias   * 20 x Redundant alternative text - . Text is same as text in paragraph under image – figure 4.1 – 4.6, 4.8, 4.9, 4.11 – 4.16 * 26 x long Alt text - figure 4.1 – 4.21 * 5 x nearby image has same text - figure 4.3, 4.5, 4.13, 4.16   Model Interpretability   * 7 x Redundant alternative text - . Text is same as text in paragraph under image – figure 5.2, ,5.3 5.6, 5.8, 5.9, 5.11, 5.15 * 26 x long Alt text - figure 5.1 – 5.15 * 3x nearby image has same text - figure 5.5, 5.7, 5.12 | The alternative text for an image is the same as nearby or adjacent text. This will be presented multiple times to screen readers or when images are unavailable.  Change either the alternative text or the adjacent text to eliminate the redundancy. In most cases, you can give the image empty/null alternative text (alt="") because the content of the image is already provided in context through text. Linked images may often be combined with the adjacent text into one link, in which case the image may be given null/empty alternative text (alt="").  Ensure the alternative text is succinct, yet descriptive. Ensure that no content is being presented in alternative text that is not available to sighted users viewing the image. When possible, either shorten the alternative text or provide the text alternative via another method (e.g., in text near the image, through a separate description page, etc.).  Ensure that the alternative text for each image or image button is appropriate while removing unnecessary redundancy. If the content of the image is already conveyed elsewhere (through text or the alternative text of a nearby image) or if the image does not convey content, the image may generally be given empty/null alternative text (alt="") |  |
| 1.3.1 Info and Relationships (Level A)  Semantic markup is used to designate headings (<h1>), regions/landmarks, lists (<ul>, <ol>, and <dl>), emphasized or special text (<strong>, <code>, <abbr>, <blockquote>, for example), etc. Semantic markup is used appropriately.  2.4.1 Bypass Blocks (Level A)  2.4.6 Headings and Labels (Level AA)  Icon index | Fundamentals of Predictive Modelling, Rules of Thumb, Ethical Applications, Avoiding Statistical Bias, Model Interpretability   * No page regions or aria landmarks * Skipped heading level – title section, learning objectives section   Fundamentals of Predictive Modelling, Avoiding Statistical Bias   * Empty Heading – learning objectives section | If the page has visual regions or significant page areas, ensure the regions are defined with header, nav, main, footer, etc. elements.  Headings provide document structure and facilitate keyboard navigation by users of assistive technology. These users may be confused or experience difficulty navigating when heading levels are skipped.  Restructure the document headings to ensure that heading levels are not skipped.  Use H2 or p with larger text styling instead of H4 for name after page heading.  Use only one H1 in the document and H2 instead of H1 for section Headings  Ensure that all headings contain informative content. |  |
| Link to PDF document | Fundamentals of Predictive Modelling   * 4 links to pdf docs   Ethical Applications   * 1 link to pdf doc | Ensure the PDF document is natively accessible. Additionally, inform the user that the link will open a PDF document. Because PDF documents may have limitations in accessibility (particularly for complex content) and require a separate program, HTML content should often be used in place of or in addition to the PDF document. |  |