**Test Cases:**

**Link Testing:**

* Test all links on the main page, including navigation links, social media links, and any other hyperlinks.
* Verify that each link opens the correct page without any errors.
* Ensure that the navigation links correctly take the user to the intended sections.

**Button Clickability:**

* Click on every button on the website, including navigation buttons, try-on buttons, and any interactive elements.
* Confirm that each button is clickable and triggers the expected action.
* Check that buttons respond promptly and do not result in any errors.

**Jewelry Try-On Realism:**

* Perform virtual try-on with different jewelry items.
* Evaluate the realism of the try-on experience by assessing how well the jewelry aligns with the user's image or the model images.
* Check for any distortions, misalignments, or unnatural appearances during the try-on process.

**Try-On Modes:**

* Test the try-on functionality in all three modes: Camera, Studio, and Model.
* Verify that users can seamlessly switch between modes without encountering issues.
* Confirm that jewelry placement and appearance are consistent across all modes.

**Negative Scenarios:**

* Attempt to perform try-on with unsupported or incompatible devices.
* Test the application's response to incorrect or invalid input during the try-on process.
* Verify that the product gracefully handles scenarios such as low lighting, poor camera quality, or obstructed views.

**Bug Reports:**

1.Title: **Virtual Jewelry Try-On Fails in Camera Mode**

Severity: Major

Steps to Reproduce:

Navigate to the "Try-On" section of the application.

Select the "Camera" mode.

Grant permission for camera access when prompted.

Choose a jewelry item for try-on.

Attempt to virtually try on the jewelry.

**Expected Result:**

The virtual try-on feature should precisely showcase the selected jewelry item by utilizing the device's camera.

**Actual Result:**

The camera feed is experiencing a freeze, resulting in the absence of the selected jewelry item on the user's image. The virtual try-on functionality in camera mode is not performing as anticipated.

**Additional Information:**

Device: iPhone 12, iOS version 15.2

Browser: Safari, version 15.1

Internet Connection: Wi-Fi with stable connectivity.

**Notes to Developers:**

The problem appears to be isolated to the camera mode. Kindly examine the camera access and rendering functionality for virtual try-ons in this mode. Reproduce the test scenario on an iPhone 12 running iOS 15.2 using Safari.

2. Title: **Misalignment of eyewear overlay is observed in Studio Mode.**

Severity: Minor

Steps to Reproduce:

Access the "Try-On" section of the application.

Select "Studio" mode.

Submit a user-provided image for a virtual try-on of eyewear.

Select an eyewear item that possesses a distinctive shape or design.

Attempt to virtually try on the selected eyewear.

**Expected Result:**

The eyewear should align correctly with the user-uploaded image, providing an accurate

representation of how the eyewear would look in real life.

**Actual Result:**

The eyewear overlay is misaligned with the user's face in the uploaded image.

It appears skewed, resulting in an inaccurate representation of how the eyewear would fit.

**Additional Information:**

Device: Android smartphone, Camera version 3.2.045

Internet Connection: Broadband with stable connectivity.

**Notes to Developers:**

The misalignment issue pertains specifically to the studio mode during eyewear try-on. Kindly examine the alignment logic and ensure that the eyewear overlay precisely aligns with facial features in user-uploaded images.

Replicate the test scenario on a MacBook Pro using the Chrome browser.

**3.Title: There is a rendering issue with pendant sets in Model Mode.**

Severity: Major

Steps to Reproduce:

Open the "Try-On" section of the application.

Select "Model" mode for virtual try-on.

Choose a pendant set with intricate details and distinct elements.

Pick a predefined model image for the try-on.

Attempt to virtually try on the selected pendant set.

**Expected Result:**

The pendant set should be rendered on the model image with precision, showcasing detailed elements and correct placement.

**Actual Result:**

The pendant set exhibits distortion and pixelation on the model image, resulting in the loss of fine details and an overall rendering of low quality. This failure compromises the accurate representation of the pendant set.

**Additional Information:**

Device: Android smartphone, Chrome browser version 98.0.4758.101

Application Version: 1.2.0

Internet Connection: Mobile data with a stable connection.

Notes to Developers:

The rendering issue is exclusive to the model mode during pendant set try-on. Please examine the rendering algorithm and image processing for pendant sets on predefined model images. Recreate the test scenario on a Windows 10 PC using the Firefox browser.

**4.Title: Images of pendant sets are not visible in Camera Mode.**

Severity: Critical

Steps to Reproduce:

Navigate to the "Try-On" section of the application.

Select "Camera" mode for virtual try-on.

Choose a pendant set for try-on.

Enable the device camera for the try-on process.

Attempt to virtually try on the selected pendant set.

Expected Result:

The camera is expected to capture the user's image, with the selected pendant set being clearly visible and accurately rendered on the captured image.

Actual Result:

The camera feed presents the user's image; however, the selected pendant set is not observable. It fails to appear on the captured image during the try-on process in camera mode.

Screenshots/Video:

Please provide screenshots or a video recording that illustrates the issue, showcasing the absence of the pendant set on the user's captured image in camera mode.

**Additional Information:**

Device: Android smartphone, Camera version 3.2.045

Application Version: 1.0.0

Internet Connection: Mobile data with a stable connection.

Notes to Developers:

The problem appears to be confined to the camera mode during pendant set try-on. Please examine the visibility and rendering of pendant sets on captured images in camera mode. Duplicate the test scenario on an Android smartphone using the specified camera version.

**5.Title: Ring RDRING2 Not Visible in Trying Mode**

Severity: Critical

Steps to Reproduce:

Navigate to the "Try-On" section of the application.

Select the ring set containing the specific ring named "RDRING2."

Enter any of the virtual try-on modes (Camera, Studio, or Model).

Choose a hand or model for the ring try-on.

Attempt to virtually try on the specific ring "RDRING2."

**Expected Result:**

The ring "RDRING2" is expected to be distinctly visible and accurately rendered on the selected hand or model during the try-on process.

**Actual Result:**

The ring "RDRING2" is not perceptible in the try-on mode, failing to appear on the selected hand or model. This prevents users from visualizing how the specific ring looks on them.

**Additional Information:**

Device: Android smartphone, Chrome browser version 98.0.4758.101

Application Version: 1.2.0

Internet Connection: Mobile data with a stable connection.

Ring Set: "Elegant Collection - RDRING2"

**Notes to Developers:**

The critical issue pertains specifically to the visibility of the ring "RDRING2" during the try-on mode across various devices. Kindly conduct an urgent investigation and address this problem, ensuring the correct rendering of the ring during virtual try-on. Duplicate the test scenario on an Android smartphone using the specified browser version.

**6.Title: Bracelet Image Misfit on Virtual Try-On**

Severity: Major

Steps to Reproduce:

Navigate to the "Try-On" section of the application.

Select a bracelet set containing an image copied from the internet.

Enter any of the virtual try-on modes (Camera, Studio, or Model).

Choose a hand or model for the bracelet try-on.

Try to virtually test the bracelet set using the image copied from the internet.

**Expected Result:**

The bracelet image is expected to fit appropriately on the selected hand or model, offering an accurate representation of how the bracelet set would appear in real life.

**Actual Result:**

The bracelet image displays distortion and misfits on the selected hand or model. It is apparent that the image has been copied from the internet without proper resizing or adaptation, leading to an unrealistic representation of the bracelet set during the virtual try-on.

**Additional Information:**

Device: Android smartphone, Chrome browser version 98.0.4758.101

Application Version: 1.2.0

Internet Connection: Mobile data with a stable connection.

Bracelet Set: "Chic Collection – Internet Copied Image Bracelet"

Notes to Developers:

The problem is critical, impacting the realistic representation of the bracelet set during virtual try-on. Kindly examine the image adaptation and resizing logic for bracelet images to ensure proper fitting on hands or models. Duplicate the test scenario on a Windows 10 PC using the specified browser version.

**7.Title: Ring Set Image Misfit on Virtual Try-On**

Severity: Major

Steps to Reproduce:

Navigate to the "Try-On" section of the application.

Select a ring set containing an image copied from the internet.

Enter any of the virtual try-on modes (Camera, Studio, or Model).

Choose a hand or model for the ring set try-on.

Attempt to virtually try on the ring set with the internet-copied image.

**Expected Result:**

The image of the ring set is expected to fit appropriately on the selected hand or model, offering an accurate representation of how the rings would appear in real life.

**Actual Result:**

The image of the ring set exhibits distortion and does not fit the selected hand or model correctly. It is evident that the image has been copied from the internet without proper resizing or adaptation, leading to an unrealistic representation of the ring set during the virtual try-on.

**Additional Information:**

Device: iPhone 12, Safari browser version 15.2

Internet Connection: Wi-Fi with stable connectivity.

Ring Set: "Elegant Collection – Internet Copied Image Ring Set"

**Notes to Developers:**

The problem is critical, impacting the realistic representation of the ring set during virtual try-on. Kindly review the image adaptation and resizing logic for ring set images to ensure proper fitting on hands or models. Duplicate the test scenario on an iPhone 12 using the specified browser version.

**8.Title: Excessive Zoom in Model Mode Impairs Image Visibility**

Severity: Major

Steps to Reproduce:

Access the "Try-On" section of the application.

Select "Model" mode for virtual try-on.

Choose a ring or bracelet set for try-on.

Pick a predefined model image for the try-on.

Observe the level of zoom applied to the model image during the virtual try-on.

**Expected Result:**

The model image should be clearly visible without excessive zoom, enabling users to accurately assess the appearance of the selected ring or bracelet set.

**Actual Result:**

The model image is overly zoomed, creating difficulty for users to discern the details of the selected ring or bracelet set. The excessively high zoom level results in pixelation and unclear visibility of the image.

**Additional Information:**

Device: Android, Chrome browser version 100.0.0.0

Application Version: 1.3.0

Internet Connection: Wi-Fi with stable connectivity.

**Notes to Developers:**

The problem impacts the user experience during virtual try-on in model mode. Kindly examine the zoom logic applied to model images and adjust ensure a clear and detailed view of the selected ring or bracelet set. Duplicate the test scenario on an Android tablet using the specified browser version.

**9.Title: The mangalsutra set image does not fit properly during virtual try-on.**

Severity: Major

Steps to Reproduce:

Open the application on an Android mobile device.

Navigate to the "Try-On" section.

Select a Mangalsutra set containing an image copied from the internet.

Enter any of the virtual try-on modes (Camera, Studio, or Model).

Choose a hand or model for the Mangalsutra set try-on.

Attempt to virtually try on the Mangalsutra set with the internet-copied image.

**Expected Result:**

The image of the Mangalsutra set is expected to fit appropriately on the selected hand or model, offering an accurate representation of how the Mangalsutra would appear in real life.

**Actual Result:**

The image of the Mangalsutra set exhibits distortion and does not fit properly on the selected hand or model. It is evident that the image has been copied from the internet without proper resizing or adaptation, leading to an unrealistic representation of the Mangalsutra set during the virtual try-on on the Android mobile device.

**Additional Information:**

Device: Android mobile phone, Chrome browser version 102.0.0.0

Application Version: 1.4.0

Internet Connection: Mobile data with a stable connection.

Mangalsutra Set: "Elegant Collection – Internet Copied Image Mangalsutra Set"

**Notes to Developers:**

The problem is notable as it impacts the realistic representation of the Mangalsutra set during virtual try-on on Android mobile devices. Kindly review the image adaptation and resizing logic for Mangalsutra set images to ensure proper fitting on hands or models. Duplicate the test scenario on an Android mobile phone using the specified browser version.

**10.Title: Necklace Image Misfit on Virtual Try-On (Android Mobile)**

Severity: Major

Steps to Reproduce:

Open the application on an Android mobile device.

Navigate to the "Try-On" section.

Select a necklace containing an image copied from the internet.

Enter any of the virtual try-on modes (Camera, Studio, or Model).

Choose a neck or model for the necklace try-on.

Attempt to virtually try on the necklace with the internet-copied image.

**Expected Result:**

The image of the necklace should fit appropriately on the selected neck or model, offering an accurate representation of how the necklace would appear in real life.

**Actual Result:**

The image of the necklace exhibits distortion and does not fit properly on the selected neck or model. It is apparent that the image has been copied from the internet without proper resizing or adaptation, leading to an unrealistic representation of the necklace during the virtual try-on on the Android mobile device.

**Additional Information:**

Device: Android mobile phone, Chrome browser version 102.0.0.0

Application Version: 1.4.0

Internet Connection: Mobile data with a stable connection.

Necklace: "Fashionable Collection – Internet Copied Image Necklace"

**Notes to Developers:**

The problem is noteworthy as it impacts the realistic representation of the necklace during virtual try-on on Android mobile devices. Kindly review the image adaptation and resizing logic for necklace images to ensure proper fitting on necks or models. Duplicate the test scenario on an Android mobile phone using the specified browser version.

**11.Title: Slow Image Loading Speed During Virtual Try-On**

Severity: Major

Steps to Reproduce:

Open the application on any supported device.

Navigate to the "Try-On" section.

Choose any virtual try-on mode (Camera, Studio, or Model).

Select a jewelry item (e.g., ring, bracelet, necklace) for virtual try-on.

Observe the loading speed of the images during the try-on process.

**Expected Result:**

Images should load rapidly and seamlessly, delivering a smooth virtual try-on experience for users.

**Actual Result:**

The loading speed of images is sluggish, resulting in delays and adversely affecting the user experience during the virtual try-on. The slow loading speed impedes the real-time visualization of the selected jewelry items.

Additional Information:

Device: Varies (Specify the devices tested, e.g., iPhone 12, Android tablet, Windows PC)

Browser/Application Version: Varies (Specify the browser or application version used for testing)

Internet Connection: Varies (Specify the type of connection, e.g., Wi-Fi, mobile data)

**Notes to Developers:**

The substantial impact of slow image loading on the user experience during virtual try-on is a critical concern. Kindly investigate and optimize the image loading process to ensure swift and seamless rendering of jewelry items. Consider optimizing image sizes, implementing caching mechanisms, or utilizing a Content Delivery Network (CDN) to enhance loading times. Replicate the test scenario on various devices and under different network conditions to ensure a consistent improvement in loading speed.