



INDIVIDUAL ASSIGNMENT

LANKA

COMP40004

WEB DEVELOPMENT AND OPERATING SYSTEMS-2

CF2261CS

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HAND OUT DATE: 2nd week

HAND IN DATE: ASSIGNMENT2: 10th June 2022

ASSIGNMENT3: 20th December 2022

WEIGHTAGE: ASSIGNMENT 2: 30% ASSIGNMENT 3: 30%

INSTRUCTION TO CANDIDATES:

- 1. Students are advised to underpin their answers with the use of references (cited using the Harvard Name System of Referencing).**
- 2. Late submission will be awarded zero (0) unless Extenuating Circumstances (EC) are upheld.**
- 3. Cases of plagiarism will be penalized**
- 4. Assignment presentation should be submitted in the form of softcopy and hardcopy both; modeling work should be submitted in softcopy form**

WDOS2 - Assignment 3

Introduction:

The tea museum page provides a Button as 'Book Now'. If a user clicks that button, the website should be redirected to a new ECMA Script application for booking train tours for the tea museum. This page mainly has three subsections as "Dates", "Guests" & "Duration". The 3 sections should be as follows:

Guests:

- o Full Name (required field)
- o Mobile Number (required field)
- o Email (required field)
- o Confirm Email (required field)
- o Gender (should be a drop-down menu and options are 'Male' and "Female", this is an optional field)
- o Ticket Category (required field)

Duration:

- o Visitors should be able to select duration from a drop-down menu. Available
- o options are 3 hrs, ½ day and full day (default value is 3 hrs)• Users will be charged additional amount based on the selected duration.

Dates:

- o Users should be able to select dates for his visit from an embedded calendar as follow

Functionality:

- o current order
- o cost of the current order
- o overall order
- o overall cost of the order

Donate feature in the Purchase & Donate page

- o Provide a fix donation amounts to be selected by the user (100, 500, 1000, 2000, 5000 and 10000 LKR)
- o Provide UI controls to enter the name, address and credit card details
- o Upon submission generates a successfully donated message

Donate Form Page (Testing):

WAVE:

The image shows a screenshot of the WAVE (Web Accessibility Evaluation Tool) interface. On the left, the WAVE logo is visible, along with the text "powered by WebAIM". Below this, there is a toggle switch for "Styles: OFF" and "ON". A "Summary" section displays various metrics: 4 Errors (red X icon), 0 Contrast Errors (red circle icon), 5 Alerts (yellow triangle icon), 9 Features (green checkmark icon), 14 Structural Elements (blue triangle icon), and 0 ARIA (purple square icon). A "View details" button is at the bottom of the summary section. On the right, a "DONATIONS" form is displayed. It includes input fields for "Card Holder Name", "Address", "Card Number", and "CVV / CVC". There is a dropdown menu for "Donation Amount" currently set to "100 LKR". A "Submit" button is at the bottom of the form. The background of the page is a light beige color with a faint "LOCAL MERCHANDISE" logo at the bottom.

Lighthouse:

The screenshot shows the Chrome DevTools Lighthouse audit interface. The browser window displays a page titled "DONATIONS" with a form for card payments. The Lighthouse panel on the left shows the following scores:

Metric	Score
Performance	96
Accessibility	94
Best Practices	100
SEO	100
PWA	—
Overall Performance	96

The background page content includes a paragraph about a tea industry economy and a "DONATIONS" form with fields for Card Holder Name, Address, Card Number, CVV / CVC, and Donation Amount (set to 100 LKR), followed by a "Submit" button.

Ticket Booking Page (Testing):

WAVE:

The WAVE (Web Accessibility Evaluation Tool) interface is shown on the left, displaying a summary of accessibility issues. The 'Styles' toggle is set to 'ON'. The summary includes:

- Errors: 0
- Contrast Errors: 0
- Alerts: 9
- Features: 12
- Structural Elements: 10
- ARIA: 0

A 'View details' button is visible at the bottom of the summary. The right side of the image shows the 'TRAIN TOURS' page being tested, which includes a form for 'GUESTS' (First Name, Last Name, Gender, Email Address, Confirm Email Address, Phone Number) and a 'TICKET TYPE' section.

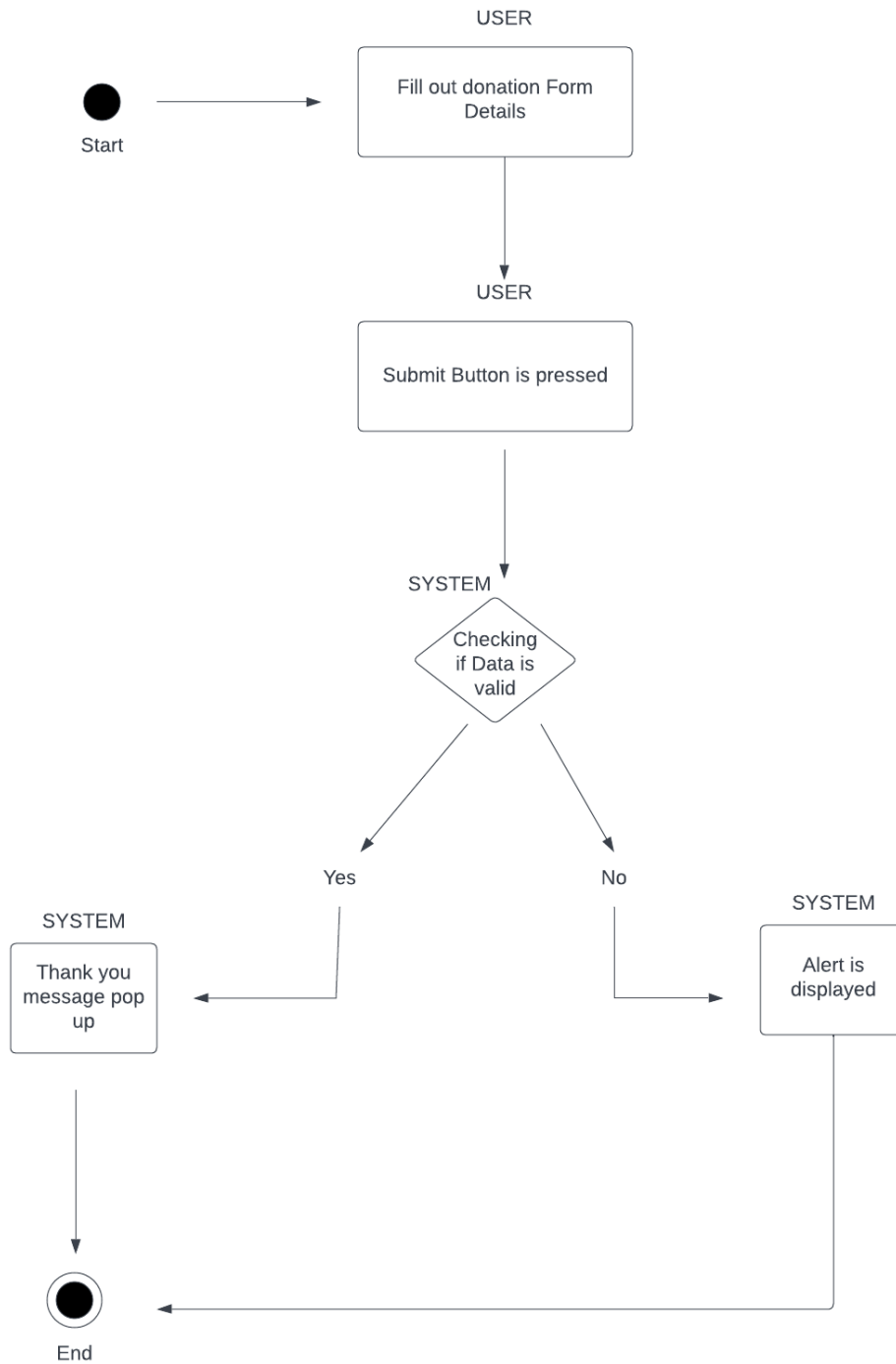
Lighthouse:

The Lighthouse accessibility audit results are shown on the left, with scores for various categories:

- Performance: 100
- Accessibility: 100
- Best Practices: 100
- SEO: 80
- PWA: 100

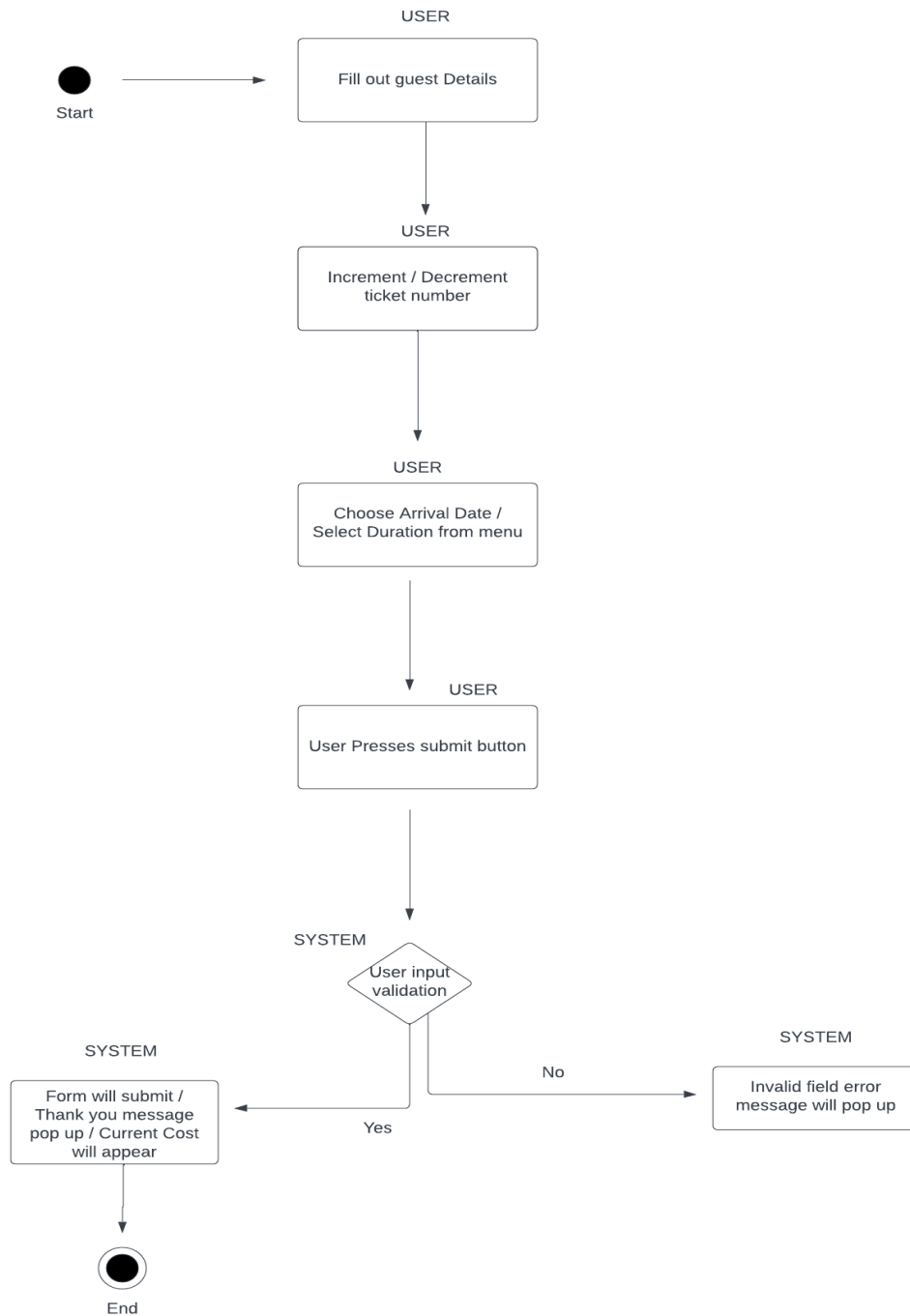
The right side of the image shows the 'TRAIN TOURS' page, which includes a 'GUESTS' form (First Name, Last Name, Gender, Email Address, Confirm Email Address, Phone Number) and a 'TICKET TYPE' section (SL Adult).

Activity Diagrams (Donate Page):

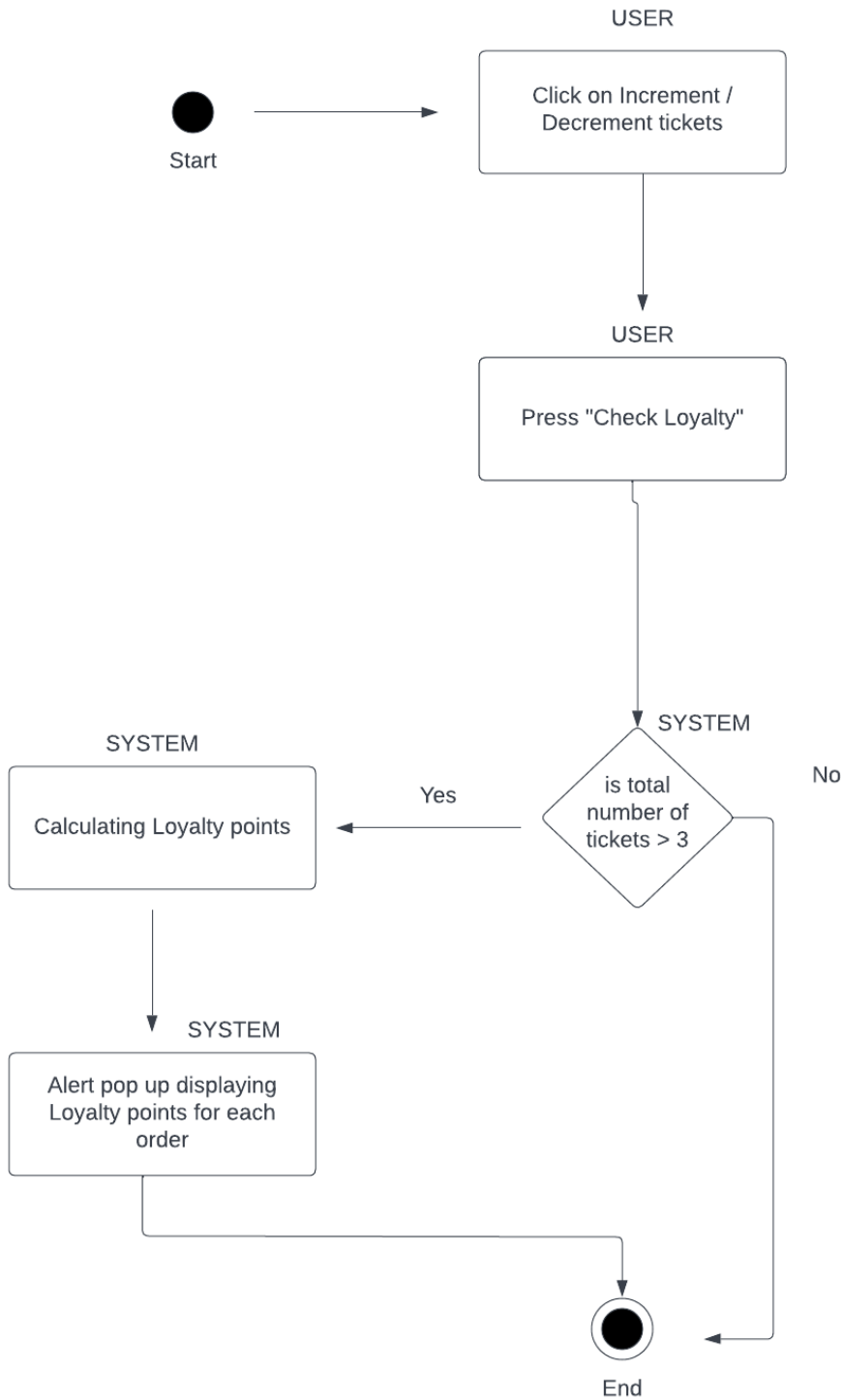


Activity Diagrams (Ticket Booking Page):

Calculate Ticket cost:



Calculate / Displaying Loyalty Points :



HTML Validity:

Nu Html Checker

This tool is an ongoing experiment in better HTML checking, and its behavior remains subject to change

Showing results for Ticket.html

Checker Input

Show ☒ source ☐ outline ☐ image report [Options...](#)

Check by [file upload](#) [Choose File](#) No file chosen

Uploaded files with .xhtml or .xht extensions are parsed using the XML parser.

[Check](#)

Use the Message Filtering button below to hide/show particular messages, and to see total counts of errors and warnings.

[Message Filtering](#)

1. **Error** The character encoding was not declared. Proceeding using `windows-1252`.

2. **Error** Attribute `form` not allowed on element `form` at this point.

[From line 44, column 5; to line 44, column 28](#)

```
/div><form form class="form"><
```

Attributes for element `form`:

[Global attributes](#)

[accept-charset](#) — Character encodings to use for [form submission](#)

[action](#) — URL to use for [form submission](#)

[autocomplete](#) — Default setting for autofill feature for controls in the form

[enctype](#) — [Entry list](#) encoding type to use for [form submission](#)

[method](#) — Variant to use for [form submission](#)

[name](#) — Name of form to use in the [document.forms](#) API

[novalidate](#) — Bypass form control validation for [form submission](#)

[target](#) — [Navigable](#) for [form submission](#)

[rel](#)

CSS Validity:



The W3C CSS Validation Service

W3C CSS Validator results for ticket.css (CSS level 3 + SVG)

Jump to: [Warnings \(2\)](#) [Validated CSS](#)

W3C CSS Validator results for ticket.css (CSS level 3 + SVG)

Congratulations! No Error Found.

This document validates as [CSS level 3 + SVG](#) !

To show your readers that you've taken the care to create an interoperable Web page, you may display this icon on any page. Add this icon to your Web page:



```
<p>
  <a href="http://jigsaw.w3.org/css-validator/check/referer">
    
  </a>
</p>
```

Conclusion :

The purchase and donate and ticket booking features have been tested and the results have been included in the document. The application's performance was improved during the testing by fixing minor errors to increase the efficiency of the web application. The ticket booking page was thoroughly tested to ensure reliability and functionality as well as to improve user experience throughout the booking process.