

TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES
938 Aurora Blvd. Cubao, Quezon City

COLLEGE OF INFORMATION TECHNOLOGY EDUCATION

Project: Developing E-Commerce Website using HTML5 and CSS
The Digital Era

In Partial Fulfilment of the Requirements for
ITE 011 – Introduction to Computing

by:

Luzana, Emmanuelle Angelo / BSECE
Membreve, Jayson Dale / BSECE
Olarte, Joziah James / BSECE
Ramillo, Kim Jay / BSECE
Salem, Joaquin Dominic / BSECE
Tolosa, Earl Justin / BSECE

Ms. Arceli F. Salo
Instructor

May 2025

Company Background

The Digital Era of Learning

Founded by Luzana, Membreve, Olarte, Ramilo, and Salem in May 2025, **The Digital Renaissance of Learning** is a hub designed to bridge the gap between education and technology. As the world rapidly shifts toward digital transformation, this platform serves as a guide for students, educators, and tech enthusiasts to embrace the power of Information Technology Education (ITE).

Our goal is to empower students, educators, and tech enthusiasts by providing innovative learning tools, industry insights, and cutting-edge resources.

As for the progress of founding the company, the team took care of the mockup designs and managed to set up the code of the webpage, and made sure that most of the primary objectives of the company's overall setup were met.

Products

Books: ₱1250.00 per book, ₱4000.00 for Full Series. (these are just mockups)

- Automation
- Internet
- Education
- Technology

Screenshots:

The screenshot shows a website header with "The Digital Era of Learning" logo, navigation links for BOOKS ▾, PROMOS, LEARN MORE, ABOUT US, and SHOP. A dropdown menu under BOOKS includes categories like Automation, Internet, Education, and Technology. Below the header, a section titled "POPULAR SELECTION" features a large image of a graduation cap resting on a computer monitor displaying the word "EDUCATION", with a diploma scroll tucked behind it. To the right, a box titled "BOOK PREVIEW:" contains the title "The Digital Era of Learning: Education Reimagined" and a brief description of the book's content and challenges.

POPULAR SELECTION

BOOK PREVIEW:

The Digital Era of Learning: Education Reimagined explores how technology is reshaping education into a more flexible, accessible, and personalized experience. From online courses and AI-powered tools to global virtual classrooms, learning today happens anywhere, anytime. While digital education offers huge advantages like scalability and engagement, it also faces challenges like access gaps and teacher readiness. The future points to a hybrid model where lifelong, tech-driven learning becomes the norm. [View on Website](#)

**The Digital Era of Learning
Background**

Welcome to The Digital Renaissance of Learning, a platform dedicated to revolutionizing education through Information Technology. Our goal is to empower students, educators, and tech enthusiasts by providing innovative learning tools, industry insights, and cutting-edge resources.

Welcome to The Digital Renaissance of Learning, a hub designed to bridge the gap between education and technology. As the world rapidly shifts toward digital transformation, this platform serves as a guide for students, educators, and tech enthusiasts to embrace the power of Information Technology Education (ITE).

Automation in the Digital Era: Transforming the Way We Live and Work

The digital revolution has rapidly accelerated automation across all aspects of society. Technologies like AI, robotics, and cloud computing are enabling machines to perform tasks once handled exclusively by humans. This shift is not just about replacing labor—it's about enhancing accuracy, speeding up operations, and unlocking new possibilities for innovation.

What Is Automation in the Digital Age?

Automation refers to the use of technology to carry out tasks with minimal human input. In the digital era, this means everything from chatbots handling customer service to robots assembling products in smart factories.

Key Enablers:

- Artificial Intelligence (AI)
- Machine Learning (ML)
- Cloud Computing
- Robotic Process Automation (RPA)
- Internet of Things (IoT)



Sectors Being Transformed

- **Manufacturing:** Smart factories use sensors and robots for faster, safer production.
- **Healthcare:** AI can detect diseases early, assist in surgeries, and provide virtual care.
- **Retail & Logistics:** Automation enables 24/7 online shopping, smart inventory, and even delivery drones.
- **Office Environments:** Tasks like data entry, scheduling, and reporting are now often automated, freeing up time for strategic work.

Challenges to Consider

While automation brings many benefits, it's not without risks.

One major concern is job displacement, especially in sectors where tasks are repetitive. The workforce must adapt through upskilling and reskilling.

Other concerns include:

- Ethical use of AI (e.g., avoiding bias)
- Data privacy and security
- System overdependence

Watch this video to understand how automation is shaping our world:



Benefits of Automation

- Boosts productivity
- Reduces human error
- Cuts operational costs
- Enhances creativity by offloading routine tasks
- Supports scalability, allowing businesses to grow faster without linearly increasing staff or cost

What's Next? The Future of Automation

- ⚡ 83 million jobs may be displaced by 2025
- ⚡ But 97 million new roles could emerge, especially in tech and data-related fields

The future won't be fully automated—it will be human + machine collaboration.

The Digital Era: Internet and the Power of Connectivity

The internet is the backbone of the digital era.

What began as a tool for information sharing has evolved into a global connectivity engine, linking people, businesses, and devices in real-time.

What Does Connectivity Mean Today?

Connectivity is more than just being online—

It's the seamless exchange of data, communication, and collaboration across borders, devices, and platforms.

Core Elements of Digital Connectivity:

- High-speed broadband and mobile networks (4G, 5G)
- Cloud computing and storage
- Internet of Things (IoT)
- Smart devices and apps
- Real-time global communication



How the Internet Connects the World

- **Global Communication:** From messaging apps to video calls, people can communicate across continents in seconds.
- **Business & Commerce:** Remote work, global e-commerce, and digital banking depend on stable internet connectivity.
- **Smart Infrastructure:** Cities, homes, and vehicles are becoming "smart" through interconnected sensors and networks.
- **Education & Learning:** Students can join virtual classrooms, collaborate internationally, and access vast libraries of knowledge.

Challenges in the Digital Connectivity Landscape

While digital connectivity brings opportunity, it also exposes deep divides and vulnerabilities.

- **Digital Divide:** Millions still lack reliable access to the internet
- **Infrastructure Gaps:** Rural and developing areas are often left behind
- **Cybersecurity Threats:** More connections = more vulnerabilities
- **Information Overload:** Constant connectivity can overwhelm users

Benefits of an Interconnected World

- Instant, global communication
- Remote access to work and services
- Automated systems through device-to-device communication
- Greater access to data and collective intelligence
- Real-time monitoring and feedback in industries like healthcare, logistics, and energy

Connectivity fuels innovation, allowing ideas and services to spread faster than ever before.

Looking Ahead: The Future of Connectivity

Emerging technologies are taking connectivity to the next level:

- 5G & 6G will support faster, more stable connections
- Satellite internet (e.g., Starlink) is expanding global reach
- Edge computing allows faster data processing closer to the source
- AI-powered networks will manage connectivity smarter and more securely

In the digital era, connectivity is no longer optional—it's essential. It shapes how we live, work, learn, and evolve as a global society.

Watch this video to understand more what the internet is:



The Digital Era of Learning: Education Reimagined

The digital era has revolutionized education, transforming how we learn, teach, and share knowledge.

Traditional models are evolving into flexible, tech-driven systems that prioritize accessibility, personalization, and lifelong learning.

What Is Digital-Era Learning?

It's education powered by technology — where learning happens anytime, anywhere, often beyond the four walls of a classroom.

Key Characteristics:

- Internet-connected learning environments
 - AI-driven adaptive learning tools
 - Online courses, degrees, and certifications
 - Virtual interaction between students and teachers
 - Learning via mobile apps, games, and platforms



How It's Changing Education

- **From Static to Dynamic:** Learning is now interactive, multimedia-based, and often self-paced.
 - **From Local to Global:** Students can access teachers, peers, and resources from around the world.
 - **From One-Size to Personalized:** AI and analytics tailor content to each learner's pace and needs.
 - **From Fixed to Lifelong:** Learning doesn't stop at graduation — it's continuous and on-demand.

Challenges and Considerations in the Digital Learning Space

Despite the promise, digital learning isn't without issues

- Digital Divide: Not all students have internet access or devices
 - Motivation Gaps: Requires high self-discipline
 - Quality Variance: Not all online content meets educational standards
 - Teacher Readiness: Educators need training in digital tools and pedagogy

Benefits of Learning in the Digital Era

- **Accessibility:** Education reaches rural, underserved, and non-traditional learners
 - **Scalability:** One course can serve millions via MOOCs
 - **Personalization:** Adaptive learning paths based on performance
 - **Engagement:** Gamified learning, simulations, and interactivity
 - **Flexibility:** Learn at your own pace, on your own schedule

These benefits make learning more engaging, inclusive, and personalized. Students gain instant feedback, global collaboration opportunities, and access to rich, multimedia content—anytime, anywhere.

The path forward: The Future of Education

Education will continue to evolve into a hybrid model, combining the best of digital and physical experiences.

-  AI will customize learning even further
 -  Blockchain may secure credentials and records
 -  Satellite internet could bridge global access gaps
 -  Lifelong learning will be essential in the job market

In the digital era, education is no longer just a phase of life—it's a lifelong, connected journey.

Artificial Intelligence in Education

AI technologies are revolutionizing education by enabling personalized learning experiences, automating administrative tasks, and providing intelligent tutoring systems. These advancements help tailor educational content to individual student needs, enhancing engagement and outcomes.

Virtual and Augmented Reality in Classrooms

Virtual Reality (VR) and Augmented Reality (AR) technologies are creating immersive learning environments, allowing students to explore complex concepts through interactive simulations and virtual field trips. These tools enhance engagement and provide experiential learning opportunities.

Watch this video to learn more about online learning:



The Digital Era: Driven by Technology

The digital era is defined by rapid technological advancement.

From smartphones to AI, technology is at the heart of modern life, transforming how we live, work, communicate, and innovate.

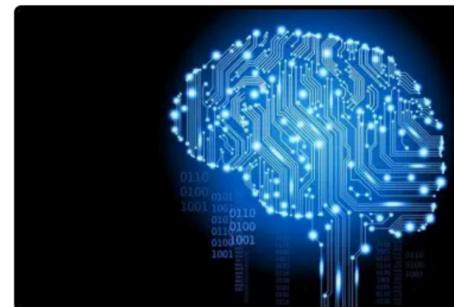
What Is the Role of Technology in the Digital Era?

Technology is the foundation of today's digital infrastructure.

It enables automation, connectivity, information access, and innovation across every sector.

Core Technologies of the Digital Age:

- Computing Power – From desktops to supercomputers
- Cloud Technology – Scalable data and service access
- Artificial Intelligence – Smart decision-making and automation
- Wireless Connectivity – 4G, 5G, and Wi-Fi networks
- Big Data & Analytics – Insights from vast data sets
- IoT (Internet of Things) – Smart devices and sensors



How Technology Shapes Daily Life

- **Communication:** Instant messaging, video calls, and social media.
- **Work:** Remote work, digital collaboration, cloud-based tools.
- **Economy:** E-commerce, digital payments, fintech.
- **Education:** Online classes, e-learning platforms, virtual labs.
- **Health:** Telemedicine, digital records, AI-assisted diagnostics.

Technology has become not just a tool—but a lifestyle enabler.

Challenges in a Tech-Driven World

As powerful as it is, technology in the digital era brings new risks.

- Digital divide – Unequal access to modern tech
- Privacy concerns – Data misuse and surveillance
- Ethical issues – Bias in algorithms, job displacement
- Tech dependency – Overreliance and digital fatigue

Benefits of Technology in the Digital Era

- Faster communication and processing
- Unlimited access to global knowledge
- Real-time global interaction and collaboration
- Efficiency in business, government, and personal tasks
- Continuous innovation in science, health, and education

These benefits make learning more engaging, inclusive, and personalized. Students gain instant feedback, global collaboration opportunities, and access to rich, multimedia content—anytime, anywhere.

In the coming years: The Future of Technology

Emerging innovations will continue to shape the future:

- 🤖 AI and machine learning for intelligent systems
- 🎨 Augmented & virtual reality for immersive experiences
- 🌐 Decentralized tech (blockchain, Web3)
- ⚡ Space-tech, biotech, and quantum computing on the rise

In the digital era, technology isn't just evolving—it's accelerating.

Watch this video to expand your knowledge of technology:

Digital Era Technology Operating Models

Ways of working Resources

Digital Era

Watch on YouTube

About Us

Welcome to our bookstore! We are passionate about books and dedicated to providing you with a wide range of titles across various genres. Our mission is to connect readers with the stories and knowledge they seek, fostering a love for reading in every community.

At our bookstore, we believe that books have the power to inspire, educate, and entertain. Whether you're looking for the latest bestseller, a classic novel, or a hidden gem, we have something for everyone. Our carefully curated selection includes fiction, non-fiction, children's books, and more.

We are committed to exceptional customer service and strive to create a welcoming environment for all book lovers. Our knowledgeable staff is always on hand to help you find the perfect book or recommend something new.

Thank you for choosing our bookstore as your go-to destination for all things literary. We look forward to helping you discover your next great read!

Order Your Book

Your Name:

Enter your full name

Region:

Enter your region

City:

Enter your city

Barangay:

Enter your barangay

Address Information (Bldk and Lot No., Unit No.):

Enter block number, unit number

Select Books:



Automation
(₱1250)



Internet
(₱1250)



Education
(₱1250)



Technology
(₱1250)



Full
Series
(₱4000)

Total Cost: ₱0

Payment Method:

Cash on Delivery (COD)

Submit Order

-----This serves as your SALES INVOICE-----

Thank you, j!

Your order for the Full Series book(s) has been successfully placed.

Amount to be paid: ₦4000

Date: 15/05/2025

Time: 10:18:23 PM

VATable: 3571.43

VAT: 428.57

Transaction Number: 517-28-459

TID: 30036537

Date Issued: 5/15/2025

Valid Until: 5/22/2025

PTU No.: F9809-WS9009-B3GD8CK

Valid Until: End of the World

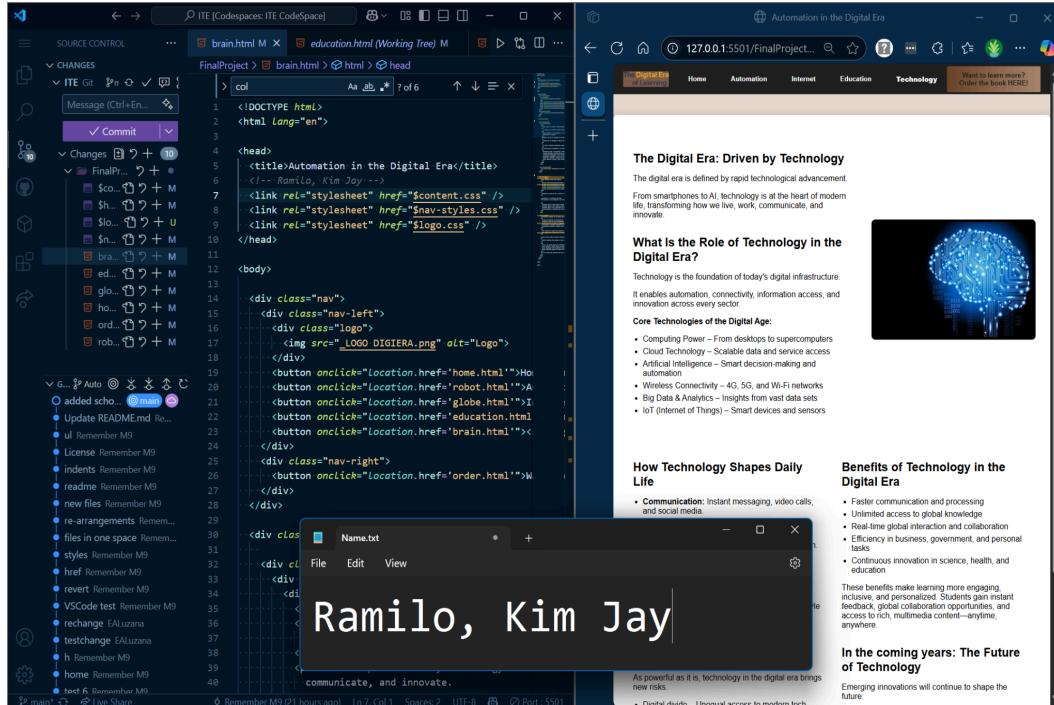
References:

- **GitHub Code Repository:** <https://github.com/EALuzana/ITE/>
- **GitHub Code History:** <https://github.com/EALuzana/ITE/commits/main/>
- **Videos used in the website:**
 - <https://www.youtube.com/watch?v=WSKi8HfcxEk&t=88s>
 - <https://www.youtube.com/watch?v=Dxcc6ycZ73M>
 - <https://www.youtube.com/watch?v=TcOEt6TdoYQ>
 - <https://www.youtube.com/watch?v=jGWLsQCYQtw>

Documentation:

File Names & Pictures

HTML	CSS
<p><u>brain.html</u></p> <pre><head> <title>Automation in the Digital Era</title> <!-- Ramilo, Kim Jay --> <link rel="stylesheet" href="\$content.css" /> <link rel="stylesheet" href="\$nav-styles.css" /> <link rel="stylesheet" href="\$logo.css" /> </head></pre>	<p>Integrated files:</p> <p>\$content.css</p> <p>\$nav-styles.css</p> <p>\$logo.css</p>

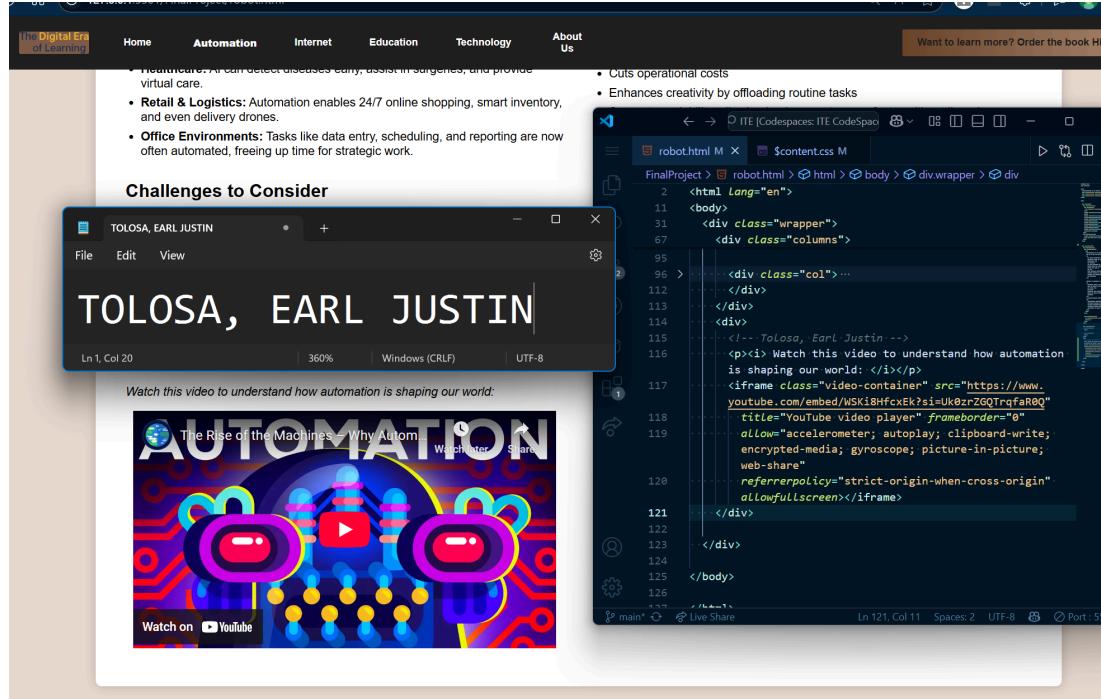


robot.html	\$content.css
<pre><div> <!-- Tolosa, Earl Justin --> <p><i> Watch this video to understand how automation is shaping our world: </i></p> <iframe class="video-container" src="https://www.youtube.com/embed/WSKi8HfcxEk?si=Uk0 zrZGQTrqfaR0Q" title="YouTube video player" frameborder="0" allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-picture; web-share"</pre>	<pre>.video-container { display: flex; justify-content: center; margin: 10px; width: 560px; height: 315px; }</pre>

```

referrerpolicy="strict-origin-when-cross-origin"
allowfullscreen></iframe>
</div>

```



education.html

```

<div class="col">
    <!-- Membreve, Jayson Dale -->
    <h2> Artificial Intelligence in Education </h2>
    <p> AI technologies are revolutionizing education by enabling personalized learning experiences, automating administrative tasks, and providing intelligent tutoring systems. These advancements help tailor educational content to individual student needs, enhancing engagement and outcomes.</p>
    <h2> Virtual and Augmented Reality in Classrooms </h2>
    <p> Virtual Reality (VR) and Augmented Reality (AR) technologies are creating immersive learning environments, allowing students to explore complex concepts through interactive simulations and virtual field trips. These tools enhance engagement and provide experiential learning opportunities.</p>
</div>

```

\$content.css

```

h2 {
    margin-top: 30px;
    margin-bottom: 10px;
    font-size: 24px;
}

.col {
    flex: 1 1 45%;
    min-width: 300px;
}

```

The Digital Era of Learning

Home Automation Internet Education Technology

learner's pace and needs.

- From Fixed to Lifelong: Learning doesn't stop at graduation — it's continuous and on-demand.

Challenges and Considerations in the Digital Learning Space

MEMBREVE, JAYSON DALE

File Edit View

MEMBREVE, JAYSON DALE

Ln 1, Col 22 | 360% | Windows (CRLF) | UTF-8

Artificial Intelligence in Education

AI technologies are revolutionizing education by enabling personalized learning experiences, automating administrative tasks, and providing intelligent tutoring systems. These advancements help tailor educational content to individual student needs, enhancing engagement and outcomes.

Virtual and Augmented Reality in Classrooms

Virtual Reality (VR) and Augmented Reality (AR) technologies are creating immersive learning environments, allowing students to explore complex concepts through interactive simulations and virtual field trips. These tools enhance engagement and provide experiential learning opportunities.

```

<html Lang="en">
  <body>
    <div class="wrapper">
      <div class="columns">
        <div class="col">
          <!-- Membreve, Jayson Dale -->
          <h2> Artificial Intelligence in Education </h2>
          <p>AI technologies are revolutionizing education by enabling personalized learning experiences, automating administrative tasks, and providing intelligent tutoring systems. These advancements help tailor educational content to individual student needs, enhancing engagement and outcomes.</p>
          <h2>Virtual and Augmented Reality in Classrooms </h2>
          <p>Virtual Reality (VR) and Augmented Reality (AR) technologies are creating immersive learning environments, allowing students to explore complex concepts through interactive simulations and virtual field trips. These tools enhance engagement and provide experiential learning opportunities.</p>
        </div>
      </div>
    </div>
  </body>
</html>

```

Automation in the Digital Era

Enter your barangay

Address Information (Blk and Lot No., Unit No.):

Enter block number, unit number

Select Books:

<input checked="" type="checkbox"/>	Automation (₱1250)	<input type="checkbox"/>	Internet (₱1250)
<input checked="" type="checkbox"/>	Education (₱1250)	<input type="checkbox"/>	Technology (₱1250)
<input type="checkbox"/>	Full Series (₱4000)		

Total Cost: ₱2500

Payment Method:

Cash on Delivery (COD)

Submit Order

```

if (checkbox.checked) { //check boxes if checked
  totalCost += parseInt(checkbox.getAttribute('data-price'));
}
totalCostDisplay.textContent = `Total Cost: ₱${totalCost}`; //display total cost
}

checkboxes.forEach(checkbox => {
  checkbox.addEventListener('change', updateTotalCost); //trigger, if checked
});

document.getElementById('orderForm').addEventListener('submit', function(event) {
  event.preventDefault(); //instead of default refresh when submitted,
  const name = document.getElementById('name').value; //get value base
  const selectedBooks = Array.from(checkboxes).filter(checkbox => checkbox.checked);
  const paymentMethod = document.getElementById('payment').value; //set payment method

  let totalCost = 0;
  selectedBooks.forEach(book => { //check each value inside the array
    const bookPrice = document.querySelector(`input[value='${book.id}']`)
    totalCost += parseInt(bookPrice); //convert data price from string
  });

  if (paymentMethod === 'card' || paymentMethod === 'ewallet') {
    alert('Sorry, Debit/Credit Card and E-wallet options are not currently available');
    return; //if choice is card/ewallet just pop the alert
  }
});

```

LUZANA, EMANUELLE

```

Ln 1, Col 18 | 17 characters | 100% | Windows (CRLF) | UTF-8
160 const currentTime = `${hours}:${minutes}:${seconds} ${ampm}`; // TOT
161
162 const vatable = (totalCost/ (1+0.12)).toFixed(2);
163 const vat = (totalCost - vatable).toFixed(2);
164 const confirmationMessage =
165   `<div class="confirmation-message">
166   <p>-----This serves as your SALES INVOICE-----</p>
167   <p>Thank you, ${name}</p>
168   <p>Your order for the ${booksMessage} book(s) has been successful</p>
169   <p><strong>Amount to be paid: ${totalCost}</strong></p>
170   <p>Date: ${currentTime}</p>
171   <p>Time: ${currentTime}</p>
172   <p>VATable: ${vatable}</p>
173   <p>VAT: ${vat}</p>
174   <p>-----</p>
175   <p>Transaction Number: ${generateTransactionNumber()}</p>
176   <p>TID: 30043030 </p>
177   <p>Date Issued: 15/6/2022</p>
178   <p>Valid Until: 31/12/2029</p>
179   <p>PTU No.: F9809-WS9009-B1GD1CK</p>
180   <p>Valid Until: End of the World</p>
181   </div>
182   `;
183
184   document.querySelector('.wrapper').innerHTML = confirmationMessage;
185 });
186 /* Luzana, Emmanuelle Angelo */

```

The Digital Era of Learning

POPULAR SELECTION

BOOK PREVIEW:

Driven by technology explores how rapid tech innovation like AI, cloud computing, and IoT is transforming every part of life, from work and education, to health and communication. Technology has become a core part of daily living, fueling progress and global connections. While it offers speed, convenience, and smarter systems, it also introduces challenges like digital inequality, privacy concerns, and overreliance. The future is all about smarter, faster, and more immersive tech that continues to reshape our world and the norm.

The Digital Era of Learning

Background

Welcome to The Digital Renaissance of Learning, a platform dedicated to revolutionizing education through Information Technology. Our goal is to empower students, educators, and tech enthusiasts by providing innovative learning tools, industry insights, and cutting-edge resources.

Welcome to The Digital Renaissance of Learning, a hub designed to bridge the gap between education and technology.

OLARTE, JOZIAH JAMES

```

Ln 2, Col 1 | 320% | Windows (CRLF) | UTF-8
2 <html>
3   <body>
4     <nav class="navbar">
5       <div class="nav-buttons">
6         <div class="nav-item" id="booksDropdown">
7           <button class="nav-button" onclick="toggleDropdown('BOOKS')">BOOKS </button>
8           <div class="dropdown-content" id="dropdownMenu">
9             <a href="robot.html">Automation</a>
10            <a href="globe.html">Internet</a>
11            <a href="education.html">Education</a>
12            <a href="brain.html">Technology</a>
13          </div>
14        </div>
15        <div class="nav-item">
16          <button class="nav-button" onclick="alert('No available promos at the moment.')">PROMOS</button>
17        </div>
18        <div class="nav-item">
19          <button class="nav-button" onclick="window.location.href='learnmore.html'">LEARN MORE</button>
20        </div>
21        <div class="nav-item">
22          <button class="nav-button" onclick="window.location.href='about-us.html'">ABOUT US</button>
23        </div>
24      </div>
25      <div class="nav-item">
26        <span onclick="location.href='order.html'">SHOP</span>
27      </div>
28    </nav>
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43

```

<div class="slide-text">

<h2>BOOK PREVIEW:</h2>

Extra Pictures:

The Digital Era of Learning

[See more](#) [See more](#) [See more](#) [See more](#)

Welcome to The Digital Era of Learning. a platform dedicated to revolutionizing education through Information Technology.

Our goal is to empower students, educators, and tech enthusiasts by providing innovative learning tools, industry insights, and cutting-edge resources.

The Digital Era of Learning

Salem, Joaquin Dominic

File Edit View

1 2 3 4 5 + ▾

Automation Trade Education Technology

Want to learn more? Order the book [HERE!](#)

Automation in the Digital Era: Transforming the Way We Live and Work

The digital revolution has rapidly accelerated automation across all aspects of society. Technologies like AI, robotics, and cloud computing are enabling machines to perform tasks once handled exclusively by humans. This shift is not just about replacing labor—it's about enhancing accuracy, speeding up operations, and unlocking new possibilities for innovation.

What Is Automation in the Digital Age?

Automation refers to the use of technology to carry out tasks with minimal human input. In the digital era, this means everything from chatbots handling customer service to robots assembling products in smart factories.

Key Enablers:

- Artificial Intelligence (AI)
- Machine Learning (ML)
- Cloud Computing
- Robotic Process Automation (RPA)
- Internet of Things (IoT)

1 2 3 4 5 + ▾

Automation

Trade

Education

Technology

Want to learn more? Order the book [HERE!](#)

 Automation  Technology

 Education  Internet

 Automation



+

-

“We affirm that we shall not give nor receive any unauthorized help on this exam and that all work shall be our own.”