

Name: Robert Lefrandt		Grading Quarter: 4	Week Beginning: 05/12/2025
School Year: 2024-25		Subject: Software & App Design	
Monday	Notes: Minecraft for Education (Python)	Monday: Students will: <ul style="list-style-type: none"> <li>continue to define what the Software &amp; App Class is and what are the Arizona State Standards, skills, and possible credentials, certifications.</li> <li>Understand the front and back end of a web-stack</li> <li>Recognize various programming <b>Learning Management Systems</b> (LMS)</li> <li>Aware of other programming resources</li> </ul>	Academic Standards:
	Amazon Future Engineers (AFE) (Python)  Kahn Academy  Microsoft Visual Code for Educators Python resources: pythontutor	Lesson Overview: 2024-2025: Final Test Online Courses, LMS examples: Learn JavaScript and Python <ul style="list-style-type: none"> <li>Start with WebStack: front-end: HTML , CSS. JavaScript using freecodecamp</li> <li>Create accounts for freecodecamp.org <ul style="list-style-type: none"> <li>HTML, Cascading Style Sheets (CSS), JavaScript, Embedded Math (College Algebra)</li> <li>Resources: <ul style="list-style-type: none"> <li>w3schools.com</li> <li>Stackoverflow.com</li> </ul> </li> </ul> </li> <li>TechSmart: CS Python Learning Management System (LMS) <ul style="list-style-type: none"> <li>Login to online Python Student Accounts</li> <li><a href="http://www.techsmart.codes/">www.techsmart.codes/</a></li> <li>4 lists</li> <li>4.1 Lists and For-Each Loops</li> <li>4.2 List Operations</li> <li>4.3 Advanced List Operations</li> <li>4.4 Strings as Collections</li> <li>4.5 String Operations</li> <li>String Operations-Methods</li> <li>Unit 4 Test</li> <li>Unit 5 Dictionaries</li> <li>Unit 6 User Defined Functions-Any Students Work on?</li> </ul> </li> <li>Raspberry Pi Pico – Thonny(IDE) Python <ul style="list-style-type: none"> <li>Met/w Fish &amp; Game- Ari &amp;&amp; Charles-Robotics</li> </ul> </li> <li>VEX Robotics- –vr.vex.com <ul style="list-style-type: none"> <li>VEX V5-High Stakes</li> <li>VEX IQ-Rapid Relay- Block/Python</li> <li>Leading Arizona – BRHS Top 1-6 scores, BRES #6</li> </ul> </li> <li>AI/VEX AI</li> </ul>	<b>Arizona CTE: Software &amp; App Design 11.0202.00 Technical Standards</b>  <b>Domain 1 Coding/ Programming STANDARD 17.0 EMPLOY OBJECT-ORIENTED PROGRAMMING TECHNIQUES</b>  <b>Domain 2 Software/ Application Development</b>  <b>STANDARD 12.0 DEVELOP A PROGRAM</b>

Tuesday	<p>Notes:</p> <p>Minecraft for Education (Python)</p> <p>Amazon Future Engineers (AFE) (Python)</p> <p>Kahn Academy</p> <p>Microsoft Visual Code for Educators Python</p> <p>resources: pythontutor</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• continue to define what the Software &amp; App Class is and what are the Arizona State Standards, skills, and possible credentials, certifications.</li> <li>• Understand the front and back end of a web-stack</li> <li>• Recognize various programming <b>Learning Management Systems (LMS)</b></li> <li>• Aware of other programming resources</li> </ul> <p>Lesson Overview:</p> <p>2024-2025: Final Test</p> <p>Online Courses, LMS examples: Learn JavaScript and Python</p> <ul style="list-style-type: none"> <li>• Start with WebStack: front-end: HTML , CSS. JavaScript using freecodecamp</li> <li>• Create accounts for freecodecamp.org <ul style="list-style-type: none"> <li>◦ HTML, Cascading Style Sheets (CSS), JavaScript, Embedded Math (College Algebra)</li> <li>◦ Resources: <ul style="list-style-type: none"> <li>▪ w3schools.com</li> <li>▪ Stackoverflow.com</li> </ul> </li> </ul> </li> <li>• TechSmart: CS Python Learning Management System (LMS) <ul style="list-style-type: none"> <li>◦ Login to online Python Student Accounts</li> <li>◦ <a href="http://www.techsmart.codes/">www.techsmart.codes/</a></li> <li>◦ 4 lists</li> <li>◦ 4.1 Lists and For-Each Loops</li> <li>◦ 4.2 List Operations</li> <li>◦ 4.3 Advanced List Operations</li> <li>◦ 4.4 Strings as Collections</li> <li>◦ 4.5 String Operations</li> <li>◦ String Operations-Methods</li> <li>◦ Unit 4 Test</li> <li>◦ Unit 5 Dictionaires</li> <li>◦ Unit 6 User Defined Functions-Any Students Work on?</li> </ul> </li> <li>• Raspberry Pi Pico – Thonny(IDE) Python <ul style="list-style-type: none"> <li>◦ Met/w Fish &amp; Game- Ari &amp;&amp; Charles-Robotics</li> </ul> </li> <li>• VEX Robotics- –vr.vex.com <ul style="list-style-type: none"> <li>◦ VEX V5-High Stakes</li> <li>◦ VEX IQ-Rapid Relay- Block/Python</li> <li>◦ Leading Arizona – BRHS Top 1-6 scores, BRES #6</li> </ul> </li> <li>• AI/VEX AI</li> </ul>	<p>Academic Standards:</p> <p><b>Arizona CTE: Software &amp; App Design 11.0202.00 Technical Standards</b></p> <p><b>Domain 1 Coding/ Programming STANDARD 17.0 EMPLOY OBJECT-ORIENTED PROGRAMMING TECHNIQUES</b></p> <p><b>Domain 2 Software/ Application Development STANDARD 12.0 DEVELOP A PROGRAM</b></p>
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Thursday	<p>Notes:</p> <p>Minecraft for Education (Python)</p> <p>Amazon Future Engineers (AFE) (Python)</p> <p>Kahn Academy</p> <p>Microsoft Visual Code for Educators Python</p> <p>resources: pythontutor</p>	<p>Students will: <b>Graduation</b></p> <ul style="list-style-type: none"> <li>• continue to define what the Software &amp; App Class is and what are the Arizona State Standards, skills, and possible credentials, certifications.</li> <li>• Understand the front and back end of a web-stack</li> <li>• Recognize various programming <b>Learning Management Systems (LMS)</b></li> <li>• Aware of other programming resources</li> </ul> <p>Lesson Overview:</p> <p>Online Courses, LMS examples: Learn JavaScript and Python</p> <ul style="list-style-type: none"> <li>• Start with WebStack: front-end: HTML , CSS. JavaScript using freecodecamp</li> <li>• Create accounts for freecodecamp.org <ul style="list-style-type: none"> <li>◦ HTML, Cascading Style Sheets (CSS), JavaScript, Embedded Math (College Algebra)</li> <li>◦ Resources: <ul style="list-style-type: none"> <li>▪ w3schools.com</li> <li>▪ Stackoverflow.com</li> </ul> </li> </ul> </li> <li>• TechSmart: CS Python Learning Management System (LMS) <ul style="list-style-type: none"> <li>◦ Login to online Python Student Accounts</li> <li>◦ <a href="http://www.techsmart.codes/">www.techsmart.codes/</a></li> <li>◦ 4 lists</li> <li>◦ 4.1 Lists and For-Each Loops</li> <li>◦ <b>4.2 List Operations</b></li> <li>◦ <b>4.3 Advanced List Operations</b></li> <li>◦ <b>4.4 Strings as Collections</b></li> <li>◦ <b>4.5 String Operations</b></li> <li>◦ <b>String Operations-Methods</b></li> <li>◦ <b>Unit 4 Test</b></li> <li>◦ <b>Unit 5 Dictionaires</b></li> <li>◦ <b>Unit 6 User Defined Functions-Any Students Work on?</b></li> </ul> </li> <li>• Raspberry Pi Pico – Thonny(IDE) Python <ul style="list-style-type: none"> <li>◦ Met/w Fish &amp; Game- Ari &amp;&amp; Charles-Robotics</li> </ul> </li> <li>• VEX Robotics- –vr.vex.com <ul style="list-style-type: none"> <li>◦ VEX V5-High Stakes</li> <li>◦ VEX IQ-Rapid Relay- Block/Python</li> <li>◦ Leading Arizona – BRHS Top 1-6 scores, <b>BRES #6</b></li> </ul> </li> <li>• AI/VEX AI</li> </ul>	<p>Academic Standards:</p> <p><b>Arizona CTE: Software &amp; App Design 11.0202.00 Technical Standards</b></p> <p><b>Domain 1 Coding/ Programming STANDARD 17.0 EMPLOY OBJECT-ORIENTED PROGRAMMING TECHNIQUES</b></p> <p><b>Domain 2 Software/ Application Development STANDARD 12.0 DEVELOP A PROGRAM</b></p>
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