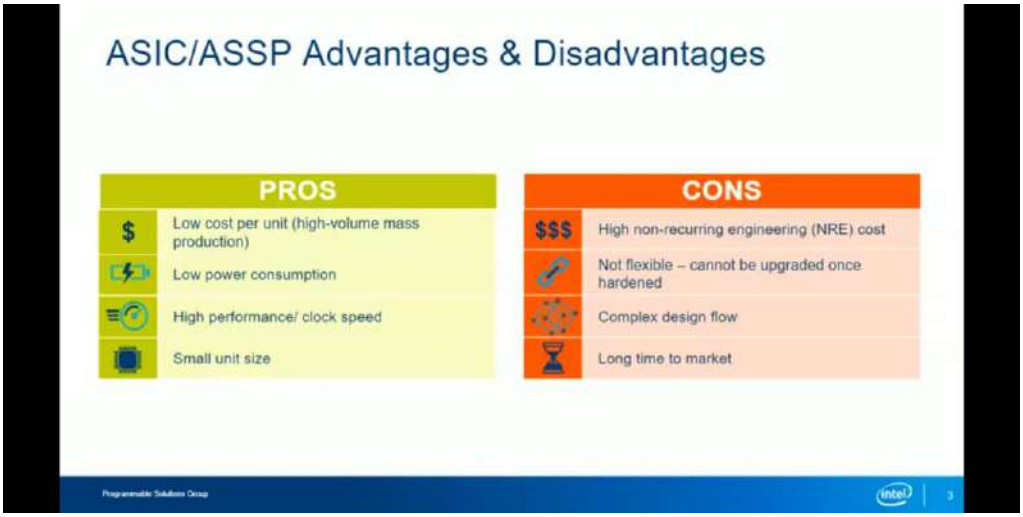
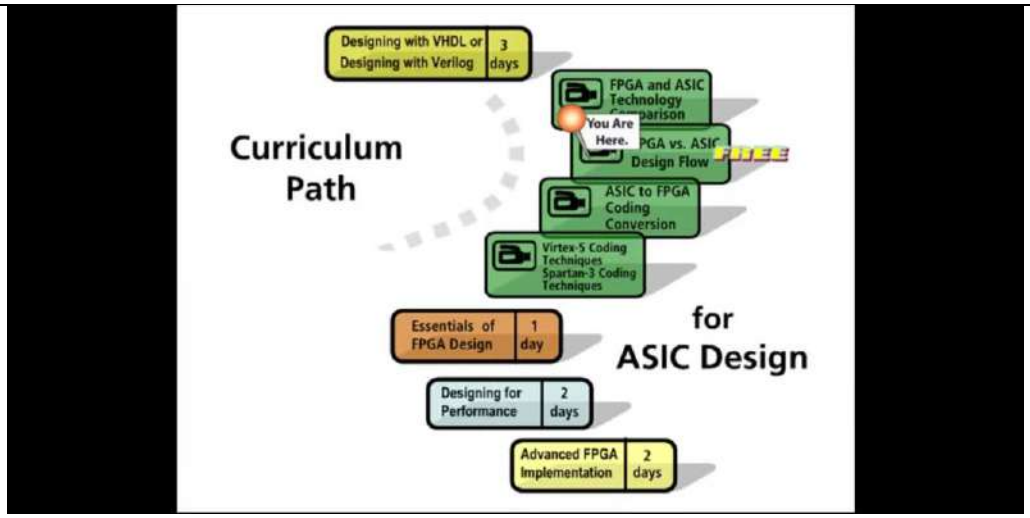
DAILY ASSESSMENT FORMAT

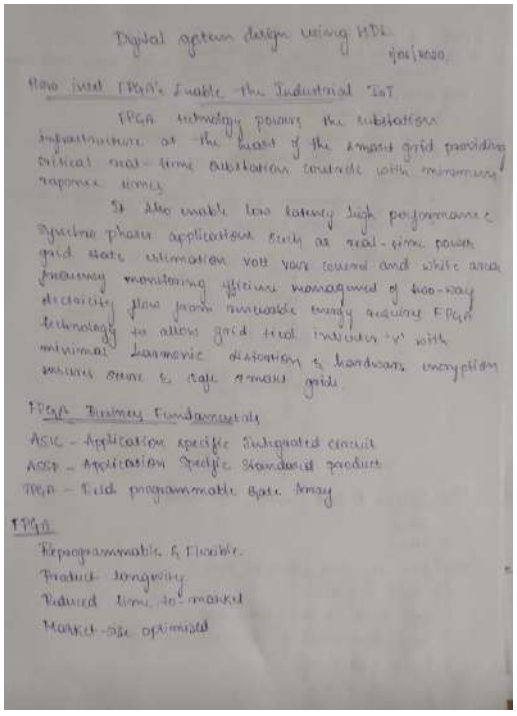
Date:	**01/06/2020**	**Name:**	**Lavanya B**
Course:	**Digital system design using HDL**	**USN:**	**4al17ec043**
Topic:	**FPGA business fundamentals FPGA basics**	**Semester & Section:**	**6th A**
Github Repository:	**Lavanya-B**		

FORENOON SESSION DETAILS
Image of session





Report



Digital system design using HDL

How intel FPGA's Enable the Industrial IoT

FPGA technology powers the substation infrastructure at the heart of the smart grid providing critical real-time substation controls with minimum response times

It also enable low latency high performance Synchro phasor applications such as real-time power grid state estimation volt var control and wide area situational monitoring efficient management of two-way electricity flow from renewable energy sources FPGA technology to allow grid level interoperability with minimal harmonic distortion & hardware encryption ensures secure & safe smart grids

FPGA Business Fundamentals

ASIC - Application specific Integrated circuit
ASSP - Application Specific Standard product
FPGA - Field programmable gate Array

FPGA

Reprogrammable & Flexible
Product longevity
Reduced time-to-market
Market-size optimized

FPGA vs ASIC Design Flow

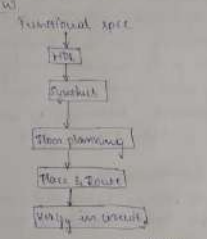
- ASIC & FPGA design & implementation

Xilinx FPGAs provide for reduced design time and later bug fixes

- No design for test logic is required
- Deep sub-micron verification is done
- No waiting for prototypes

- coding style
  - For high-performance design, FPGAs may require some pipelining
  - The code usually requires optimizations

ASIC design flow



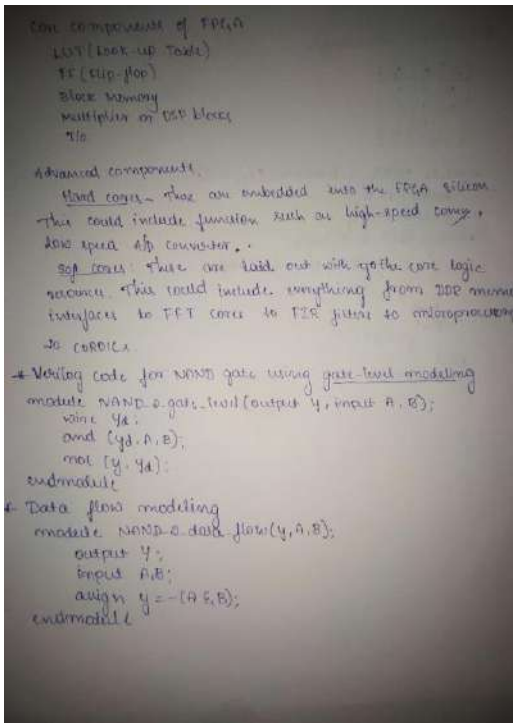
FPGA Basics - A look under the Hood

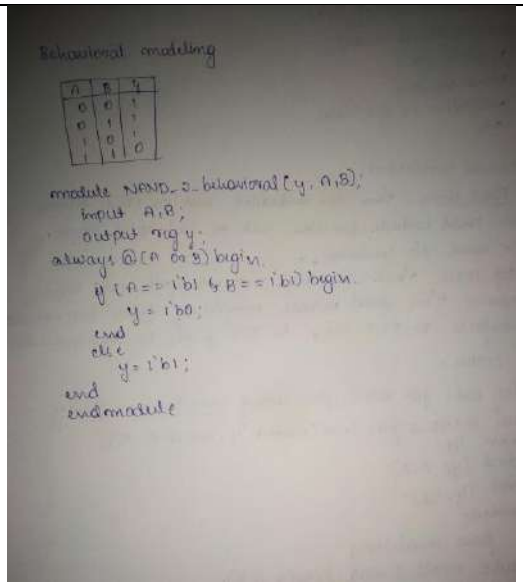
Altera

Xilinx

The four algorithm attributes are.

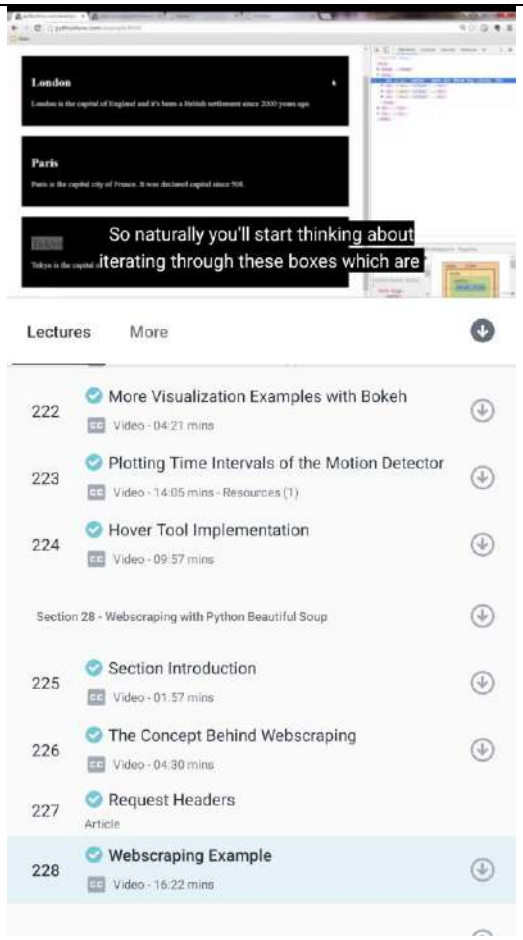
1. Parallel processes
2. High data-to-clock-rate-ratio
3. Large quantities of deterministic I/O
4. Signal processing





Date:	**01/06/2020**	**Name:**	**Lavanya B**
Course:	**Python**	**USN:**	**4al17ec043**
Topic:	**Webscraping with python beautiful soup**	**Semester & Section:**	**6th A**

AFTERNOON SESSION DETAILS
Image of session


London
Paris
So naturally you'll start thinking about
iterating through these boxes which are
Lectures
More
222
More Visualization Examples with Bokeh
Video - 04:21 mins
223
Plotting Time Intervals of the Motion Detector
Video - 14:05 mins - Resources (1)
224
Hover Tool Implementation
Video - 09:57 mins
Section 28 - Webscraping with Python Beautiful Soup
225
Section Introduction
Video - 01:57 mins
226
The Concept Behind Webscraping
Video - 04:30 mins
227
Request Headers
Article
228
Webscraping Example
Video - 16:22 mins

Report

Webscraping with python beautiful soup

Automated web scraping can be a solution to speed up the data collection process.

Webscraping

Web scraping is used to collect large information from websites.

- **Price Comparison: Services such as ParseHub use web scraping to collect data from online shopping websites and use it to compare the prices of products.**
- **Email address gathering: Many companies that use email as a medium for marketing, use web scraping to collect email ID and then send bulk emails.**
- **Social Media Scraping: Web scraping is used to collect data from Social Media websites such as Twitter to find out what's trending.**
- **Research and Development: Web scraping is used to collect a large set of data (Statistics, General Information, Temperature, etc.) from websites, which are analyzed and used to carry out Surveys or for R&D.**
- **Job listings: Details regarding job openings, interviews are collected from different websites and then listed in one place so that it is easily accessible to the user.**

Challenge

1. **Variety**
2. **Durability**

APIs

Application Programming Interfaces (APIs) that allow you to access their data in a predefined manner. With APIs, you can avoid parsing HTML and instead access the data directly using formats like JSON and XML. HTML is primarily a way to visually present content to users.

Extract data using webscraping

1. **Find the URL that you want to scrape**
2. **Inspecting the Page**
3. **Find the data you want to extract**
4. **Write the code**
5. **Run the code and extract the data**
6. **Store the data in the required format**

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