Content Objective: Students will begin to work with I/O and exception handling in Java.

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| **On the Tech Horizon (10pts.)**  **link to a tech/coding related article or journal no more than one month old (no blogs or reddit clones see below)** | |
| URL: |  |
| Reaction/Commentary: |  |

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| **Tech Terms and History (20pts.)**  **vocabulary from BJ p.513-558 and The Information Chapter 9 (definition/commentary/significance in your words)** | |
| Syntax to create a file object | File varName = new File(“fileName”); |
| Syntax with PrintWriter to construct a file with a name | PrintWriter out = new PrintWriter(“output.txt”); |
| Syntax for main method to use FileNotFoundException | public static void main(String[] args) throws FileNotFoundException  { |
| Syntax for indicating directories in paths | File inputFile = new File(“c:\\stuff\\etc”); double backslashes to navigate folders |
| Proper syntax using Scanner for new file name | Scanner in = new Scanner (“input.txt”); |
| Syntax for reading a webpage | URL pageLocation = new URL(web address); |
| Syntax to specify character encoding for text file | PrintWriter out = new PrintWriter(file, **“UTF-8”**); |
| Syntax for reading one character at a time | while(in.hasNext()){  char character = in.next().charAt(0);  //do something with the character  } |
| Syntax for only reading numbers | Character.isDigit(character); |
| Syntax for reading a line of text | while (in.hasNextLine())  String line = in.nextLine(); |
| Syntax for removing spaces | BJ p.522 |
| Syntax to convert a string to a number | BJ p.522 |
| What is the value in using the “hasNextInt()” method | BJ p. 523 |
| Syntax for reading and storing different data types | BJ p. 523 |
| List and try each formatting flag and type on BJ p. 524-525 |  |
| Syntax to throw exception | BJ p.534 |
| Three main types of exceptions | BJ p. 535 |
| Syntax for catching exceptions | BJ p.536 |
| What is a “checked” exception? | BJ p.538 |
| Syntax for throw clause | BJ p. 539 |
| Syntax for finally clause | BJ p. 540 |
| What does it mean to throw early and catch late? |  |
| Summarize strategy for handling input errors with the supplied DataAnalyzer.java | BJ p.545-546 |

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| **Code Snippets (30pts.)**  **only submit snippets or classes no full programs required (test and run in IDE, then copy/paste applicable code frag)** | |
| E11.1, E11.5 |  |
| E11.7 |  |
| E11.8, E11.9 |  |
| E11.10 |  |

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| **Code Challenge (30pts.)**  **full functioning application sent to Github** | |
| You may choose any one of the following code challenges: P11.5-P11.12 and post code to GitHub | |
| Notes: |  |

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| **Badge Progress (10pts.)**  **building your coding profile: Java coding training site to earn badges (recommended site** [**http://coderbyte.com**](http://coderbyte.com) **)** | |
| Screenshot/URL: |  |
| Notes/Issues: |  |

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| **Notes**  **your notes** | |
| Notes: |  |