# Course Based Learning

(Via Projects)

Project is Based on the Language Python

"Online Registration of Financial Aid for Aboard Studies"

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2020051501

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## **Future Vision BIE**

**Abstract:** A variety of financial aid sources are available to help you pay for college or career school. Financial aid can come from federal, state, school, and private sources to help you pay for college or career school.

**Introduction:** A grant is a form of financial aid that doesn't have to be repaid (unless, for example, you withdraw from school and owe a refund, or you receive a TEACH Grant and don't complete your service obligation). A variety of federal grants are available, including Pell Grants, Federal Supplemental Educational Opportunity Grants (FSEOG), Teacher Education Assistance for College and Higher Education (TEACH) Grants, and Iraq and Afghanistan Service Grants.

Scholarships-Many nonprofit and private organizations offer scholarships to help students pay for college or career school. This type of free money, which is sometimes based on academic merit, talent, or a particular area of study, can make a real difference in helping you manage your education expenses.

Work-Study Jobs-The Federal Work-Study Program allows you to earn money to pay for school by working part-time.

Loans-When you receive a student loan, you are borrowing money to attend a college or career school. You must repay the loan as well as interest that accrue. It is important to understand your repayment options so you can successfully repay your loan.

**Motivation**: The purpose of Financial Aid is to ensure that each student has sufficient resources to enable them to attend college. We provide grants, fee waivers, scholarships, loans, and federal work-study. Financial aid funds are provided to help with all costs of attending college, including costs of enrollment fees, book and supplies, room and board, other personal and living expenses, transportation, child care, and computers. Students do not have to be a full time student to be eligible for most forms of financial aid, but full-time students do receive the maximum amount of aid available. This is so that they can take more units, Finish College faster and so that the student does not have to work so many hours.

**Existing System:** The **Free Application for Federal Student Aid (FAFSA)** is a form completed by current and prospective college students (undergraduate and graduate) in the United States to determine their eligibility for student financial aid.

The FAFSA should not be confused with the CSS Profile, which is also required by some colleges (primarily private ones). The CSS is a fee-based product of the College Board (a privately organized institution) and is usually used by the colleges to distribute their own institutional funding rather than federal or state funding.

**Limitations of Existing System:** 1) Awareness of financial aid does not necessarily cause students to apply for aid.

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- 2) Financial aid influences students' college-going decisions.
- 3) A lack of timely financial aid knowledge affects a student's likelihood of going to college.
- 4) A student's expectations concerning financial aid eligibility influence whether they will apply to and attend college.
- 5) Parents' understanding of college costs and financial aid eligibility affects students' decisions to apply to and attend college
- 6) Aversion to student loan debt can be a barrier to college enrollment, especially for low-income, minority, and first-generation college-going students.
- 7) Racial and ethnic groups prioritize long-term economic benefits and short-term costs of attending college differently.

**Proposed System**: 1) Students and families tend to learn about college tuition and financial aid toward the end of high school.

- 2) Students and families most in need of financial aid information tend to receive it later than others.
- 3) Many students develop college aspirations before attending high school, which may affect their decision to seek information about financial aid.

**System Requirement Specifications:** In addition to establishing financial need, students must meet the following criteria in order to be eligible for aid:

- be registered with the Selective Service System(for Conscription in the United States), if male and between the ages of 18 and 25, if required to do so;
- have maintained a Satisfactory Academic Progress (SAP); be a United States of America citizen, a United States of America national, or an eligible non-citizen;
- have a valid Social Security number;
- have a high school diploma;
- have signed the certification statement stating that: 1) they are not in default on a federal student loan and do not owe money on a federal student grant and 2) federal student aid will only be used for educational purposes;
- Have not been found guilty of the sale or possession of illegal drugs while federal aid was being received. [6]

**Proposed Methodology:** Using python software, the number of files on the personal computer of an average PC user is pretty high. If all of those files were placed in a single directory, it would be difficult to navigate and find files or directories. So, there is a need to arrange the files and manage them properly.

This is where a file manager comes in. A file manager allows users to manage files and directories through a user interface. While files can be managed through the command-line, not all users know how to do that.

With a file manager, users can arrange, access, and administer their files and directories properly without knowing how to use the command line. Some of the tasks a file manager allows users to perform include copying, moving, and renaming files or directories.

#### **References:** Tkinter References

Here are some official resources to check out:

- The official Python Tkinter tutorial covers Python's Tkinter module in moderate depth. It's written for more advanced Python developers and is not the best resource for beginners.
- Tkinter 8.5 reference: a Graphical User Interface for Python is an extensive reference covering the majority of the Tkinter module. It's exhaustive, but it's written in the reference style without commentary or examples.
- The Tk Commands reference is the definitive guide to commands in the Tk library. It's written for the Tcl language, but it answers a lot of questions about why things work the way they do in Tkinter. The official Python docs have a section on mapping basic Tk into Tkinter that's indispensable when you're reading the Tk Commands doc.

#### **Additional Widgets**

In this tutorial, you learned about the Label, Button, Entry, Text, and Frame widgets. There are several other widgets in Tkinter, all of which are essential for building real-world applications. Here are some resources to continue learning about widgets:

- The TkDocs Tkinter Tutorial is a fairly comprehensive guide for Tk, the underlying code library used by Tkinter. Examples are presented in Python, Ruby, Perl, and Tcl. You can find several examples of widgets beyond those covered here in two sections:
  - o Basic Widgets covers the same widgets as this tutorial, plus a few more.
  - o More Widgets covers several additional widgets.
- The official Python docs have three sections covering additional widgets:
  - o ttk themed Widgets covers the Tk themed widget set.
  - o Extension Widgets for Tk covers widgets in the Tk Interface Extension set.
  - Scrolled Text Widget details a Text widget combined with a vertical scroll bar.

#### **Application Distribution**

Once you've created an application with Tkinter, you probably want to distribute that to your colleagues and friends. Here are some tutorials to get you going with that process:

- Using PyInstaller to Easily Distribute Python Applications
- 4 Attempts at Packaging Python as an Executable
- Building Standalone Python Applications with PyOxidizer

#### **Other Graphical User Interface Frameworks**

Tkinter is not your only choice for a Python Graphical User Interface framework. If Tkinter doesn't meet the needs of your project, then here are some other frameworks to consider:

- How to Build a Python Graphical User Interface Application With wxPython
- Python and PyQt: Building a Graphical User Interface Desktop Calculator
- Building a Mobile Application With the Kivy Python Framework
- Add Graphical User Interfaces to your programs and scripts easily with PySimple Graphical User Interface

**Conclusion:** I believe the trial has shown conclusively that it is both possible and desirable to use Python as the principal teaching language:

- It is Free (as in both cost and source code).
- it is trivial to install on a Windows PC(Person Computer) allowing students to take their interest further. For many the hurdle of installing a Pascal or C compiler on a Windows machine is either too expensive or too complicated;
- it is a flexible tool that allows both the teaching of traditional procedural programming and modern OOP(Object Oriented Programming); It can be used to teach a large number of transferable skills;
- it is a real-world programming language that can be *and is* used in academia and the commercial world;
- it appears to be quicker to learn and, in combination with its many libraries, this offers the possibility of more rapid student development allowing the course to be made more challenging and varied;
- and most importantly, its clean syntax offers increased understanding and enjoyment for students: