# Pre Course Survey Humanitarian / Free / Open Source Software

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### Introduction

This survey is part of a research project to study use of humanitarian / free / open source software (H/F/OSS) projects in computing courses. Your participation in this research is optional.

Information from the questionnaire will be used for statistical studies and not in any form that identifies individuals. Your answers on this questionnaire have no bearing on your grade in any course.

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### Instructions

Please answer the questions in the sections that follow. You may skip any questions that you do not want to answer for any reason. If you have any questions about this study, contact either:

**Faculty contact**: Dr. Braught (braught@dickinson.edu) Instructor for COMP491: Computer Science Senior Seminar at Dickinson College.

**IRB contact**: Dr. Jim Ellison, Chair of the Institutional Review Board at Dickinson College (ellisonj@dickinson.edu).

Thank you.

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### Background

B0. What is your student ID#: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (to match pre/post tests)

B1. What is your age? B2. What is your gender?

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| --- | --- | --- | --- | --- | --- | --- | --- |
| 🞎 | 18 – 20 | 🞎 | Male | |  |  |  |
| 🞎 | 21- 23 | 🞎 | Female | |  |  |  |
| 🞎 | 23 or older | 🞎 | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |  |  |  |
|  | | | |

B3. Please identify your race and national origin category:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| American Indian or Alaskan Native | Asian or Pacific Islander | Black, not of Hispanic origin | Hispanic | White, not of Hispanic origin | \_\_\_\_\_\_\_\_\_\_\_\_ |
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B4. What is your first major?

B5. Second major?

B8. On a scale from 1 (one) to 5 (five), where one is beginner and five is advanced, how would you characterize your programming ability?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Beginner  1 | 2 | 3 | 4 | Advanced  5 |
| 🞎 | 🞎 | 🞎 | 🞎 | 🞎 |

B9. How many months, if any, of co-op, internship or other professional experience you have had?

B10. Have you used any H/F/OSS before? If so, please name at least some the software you have used.

|  |  |
| --- | --- |
| 🞎 | Yes |
| 🞎 | No |

Software:

B11. Have you made technical contributions (e.g. code/tests/documentation) to an H/F/OSS project before? If so please give a brief description.

|  |  |
| --- | --- |
| 🞎 | Yes |
| 🞎 | No |

Description:

Please read each of the following statements carefully. Then circle the answer on the 7-point scale that indicates your agreement or disagreement with the statement.

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|  | **H/F/OSS Statements** | **strongly disagree** | **disagree** | **neutral** | **agree** | **strongly agree** | **not applic-able** | **don't know** |
| H1 | Working on an H/F/OSS project will give me a better appreciation for the usefulness of computing. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| H2 | I expect to have a greater awareness of the potential for computing to benefit society due to working on an H/F/OSS project. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| H3 | I want to work on an H/F/OSS project because I want to help the people who would benefit from the software. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| H4 | Participating in an H/F/OSS project inspires me to use my computing skills to help others. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| H5 | Knowing that my project will help people will motivate me to do my best on the H/F/OSS project. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| H6 | I expect to enjoy working on an H/F/OSS project because it will allow me to participate in a diverse community of H/F/OSS developers. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| H7 | Working on an H/F/OSS project will increase my interest in computing. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| H8 | Working on an H/F/OSS project will increase my confidence in my computing ability. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| H9 | Participating in an H/F/OSS project will make me more comfortable with computing. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| H10 | I have participated in an H/F/OSS project prior to this class. | 1 | 2 | 3 | 4 | 5 | N/A | DK |

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|  | **Course Goal Statements** | **strongly disagree** | **disagree** | **neutral** | **agree** | **strongly agree** | **not applic-able** | **don't know** |
| DC1 | I understand how large software projects are organized. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC2 | I understand the tools and techniques used in large software projects. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC3 | I understand the role that licensing plays in H/F/OSS. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC4 | I believe that community is an important part of H/F/OSS development. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC5 | I am confident in my ability to read and understand professional level software. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC6 | I am confident in my ability to modify professional level software. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC7 | I am confident in my ability to work with other software developers. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC8 | I am able to write clearly and concisely about topics in computing. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC9 | I am able to speak with my peers clearly and confidently about topics in computing. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC10 | I am confident in my ability to learn new tools and technologies. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC11 | I feel I am prepared for a professional career in computing. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC12 | I feel I am prepared for graduate studies in computing. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC13 | The application domain of the software that I work on is important to me. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC14 | The potential benefit to the end-users of the software that I work on is important to me. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC15 | The technologies/languages used in the software that I work on is important to me. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| DC16 | The community/team of developers that I work with on the software is important to me. | 1 | 2 | 3 | 4 | 5 | N/A | DK |

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|  | **Computer Programming Statements** | **strongly disagree** | **disagree** | **neutral** | **agree** | **strongly agree** | **not applic-able** | **don't know** |
| CS2 | I believe that having good comments in code is important. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| CS3 | I thoroughly comment my code. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| CS6 | I can describe how large scale projects with multiple programmers are organized and communicate. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| CS7 | I can use version control tools like git. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| CS8 | I believe that it is essential to have good documentation for software. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| CS9 | I understand the importance of thoroughly testing code. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| CS10 | I can test code to ensure that it does what it is supposed to do. | 1 | 2 | 3 | 4 | 5 | N/A | DK |

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|  | **Software Engineering Statements** | **strongly disagree** | **disagree** | **neutral** | **agree** | **strongly agree** | **not applic-able** | **don't know** |
| SE1 | I am comfortable that I could participate in the planning and development of a real-world software project. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| SE2 | I can list the steps in the software process we used in HFOSS project. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| SE3 | I can use a software process to develop an HFOSS project. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| SE4 | I am sure that I can actively participate in an HFOSS community to develop a software project. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| SE5 | I expect to gain some confidence in collaborating with professionals from a variety of locations and cultures. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| SE7-1 | I can describe the impact of project complexity on the approaches used to develop software. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| SE6 | I can describe the impact of project size on the approaches used to develop software. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| SE7-2 | I am confident that I can maintain an HFOSS project. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| SE8 | I can describe the drawbacks and benefits of FOSS to society. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| SE9 | I can use all tools and techniques employed in my HFOSS project. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| SE10 | I can participate in an HFOSS development team’s interactions. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| SE11 | Participation in an HFOSS project will improve my understanding of how to behave like a computing professional. | 1 | 2 | 3 | 4 | 5 | N/A | DK |

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|  | **General Statements** | **strongly disagree** | **disagree** | **neutral** | **agree** | **strongly agree** | **not applic-able** | **don't know** |
| G1 | I feel confident about working with computing professionals | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| G2 | I am excited about working with computing professionals. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| G4 | Participation in an H/F/OSS project may positively reinforce my decision to make computing my major. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| G5 | Participating in an H/F/OSS project may cause me to question my decision to make computing my major. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| G6 | Participation in an H/F/OSS project may cause me to consider taking further computing courses. | 1 | 2 | 3 | 4 | 5 | N/A | DK |
| G9 | Overall, I expect to be very satisfied with my learning in the HFOSS project. | 1 | 2 | 3 | 4 | 5 | N/A | DK |

Some survey content adapted from: http://foss2serve.org/index.php/Evaluation\_Instruments