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## A Pragmatic Approach to Changing the Pedagogy of Object-Oriented Programming Paradigm using Interactive Programming Environment: Implementation and Development

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**Abstract:**

Most of the students coming from various different backgrounds find software programming a difficult subject to learn and master, especially in learning the concept of Object Oriented Programming. Because they must be able to model physical beings into virtualized objects and define complex object relationships in their designs for object interactions in a very abstract fashion that is not easily understood. The project is an attempt to introduce the an unique interactive learning platform for students to learn Java programming called BlueJ, which was designed with a set of OO programming pedagogical considerations in mind. This project will also further extend and enhance its built-in features, to supporting UML class diagrams and code fragments generation in order to ease the students to learn fundamental programming concepts. The success outcome of the project will be evaluated through a survey using the Technology Acceptance Model Framework and followed by a comprehensive statistical analysis to assess improved academic performance of the students.