



Thesis/Final Project Registration Form

Student(s) Personal Details:

First Name	Last Name	Father Name	Year	Semester	Supervisor	Project Duration	No of Students
Mohammad Azim	Sakhizadah	Ali Ahmad	1398	Spring	Rafiullah Mommand	2 semester	2
Dawood	Emran	Ebrahim					

Thesis/Final Project Details

Start of the project (year-month-day)	2019-03-23	The expected date for completion	December
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Research Topic	<i>Prototype-Driven Development of Information Systems: A case study of the software industry in Afghanistan</i>
Research Problem	<i>Prototyping activities and tools have been recently gained great attention to product development research communities[1]. There are many claims that prototyping known as part of the software development process. And also prototyping claims that decrease the risk of building the wrong product, through involvement and communication with the user. In addition, prototyper claims to increase the quality of software product through a better understanding of requirements[2]. Then prototyping when used correctly, the quality of the software will increase[3]. According to the importance of prototyping before this, there is no research about the prototyping, benefits, tools, and techniques of prototyping it in the context of Afghanistan. In this study will address the tools, techniques, and benefits of prototype-driven development in Afghanistan industry.</i>
Impact of the problem	<i>“Software projects are still late, over budget, and unpredictable. Sometimes the entire project fails before ever delivering an application[4]”. Failure of software project has many reasons. One of those is a misunderstanding of user requirements at the beginning of the projects. And we have heard a lot that collaboration helps us to implement the right requirements. But how clients and developers can achieve this collaboration? M. Schrage tells us about his experience that prototype and professionalism help us to achieve collaboration. And also say that don't go to a client meeting without prototype[5].</i>
Research Goals	<i>To study the impact of prototyping in software development in the context of Afghan software development companies.</i>
Research Questions	<i>Main Question: How the prototyping approach can help to successfully develop a management information system? Sub Questions: 1. What are the major benefits of prototyping-oriented MIS development? 2. What steps are needed to be taken to improve the prototyping approach? 3. What prototyping tools and techniques are needed to be considered to bridge the gap between theory and practice in MIS development?</i>
Methodology	<i>The research method for this study is a literature review, also we will collect the actual case study reports for analysis. The sources will be used include primary sources (articles in conferences and journals, the papers should have appeared in a reviewed journal/conference</i>



	<i>and also technical resource and other theses). To complete our report we will find more resources through the internet news service. Finally, we will document our research.</i>
Expected Outcomes	<i>Analytical report and a roadmap for prototype-driven development.</i>

Work Plan:

Semester 1:

Activities	Weeks														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Literature Review															
State of Research															
Empirical Survey															
Conducting Workshops															
Documentation															

Semester 2:

Activities	Weeks														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Data analyses															
Roadmap development for prototype-driven development															
Evaluation and assessment through co-design sessions															
Documentation															

References	
[1]	C. W. Elverum, T. Welo, and S. Tronvoll, "Prototyping in New Product Development: Strategy Considerations," <i>Procedia CIRP</i> , vol. 50, pp. 117–122, 2016.
[2]	K. Phalp and S. Counsell, "Coupling Trends in Industrial Prototyping Roles: An Empirical Investigation," <i>Softw. Qual. J.</i> , vol. 9, no. 4, pp. 223–240, 2001.
[3]	V. S. Gordon and J. M. Bieman, "Reported effects of rapid prototyping on industrial software quality," <i>Softw. Qual. J.</i> , vol. 2, no. 2, pp. 93–108, 1993.
[4]	J. S. Reel and T. D. Systems, "Critical Success Factors In Software



	Projects,” no. June 1999, pp. 18–23. [5] M. Schrage, “Never go to a client meeting without a prototype,” <i>IEEE Softw.</i> , vol. 21, no. 2, pp. 42–45, 2004.
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Declaration and Approval:

Student(s)	By signing this form I confirm that <ul style="list-style-type: none"> all the statements above are correct I have read and fully understand the examination regulations I am not in the process of writing another thesis/final project in the same subject at another university/organization. 			
	Date:	Place:	Name(s) and Signature(s):	Mohammad Azim
	2019/4/18	Kabul University		Dawood
Supervisor	I hereby confirm that I will serve as supervisor for the below-named thesis/final project:			
	Date:	Place:	Signature:	
		Kabul University		
Department	The prerequisites have been assessed and the student(s) can be registered for the thesis/final project described above.			
	Date:	Place:	Signature:	
		Kabul University		

Submit the completed form to the Information Systems Department
 Please contact the Administration Office if you have any questions

Receipt Date:

Sign: _____