# Chapter 13 SDLC Phases of a Mobile Application

#### **Drin Hoti**

Rochester Institute of Technology, Kosovo

#### Monika Maloku

Rochester Institute of Technology, Kosovo

#### Klinton Gashi

Rochester Institute of Technology, Kosovo

#### **ABSTRACT**

Class models are an essential part of mobile game architecture, providing a framework for organizing and structuring the code. These models help developers to understand the relationships and dependencies between different objects in the game, allowing for more efficient and effective code development. The use of class models is likely to continue to evolve and improve in the future, as mobile games become more complex and sophisticated. As AI and ML technologies become more advanced, developers will need to create new classes and models to represent these technologies in mobile games. Additionally, the use of cloud computing and other distributed technologies is likely to become more prevalent, requiring the creation of new classes and models to represent these technologies in the game. Overall, class models will play a critical role in enabling developers to create more engaging and immersive mobile gameplay experiences.

DOI: 10.4018/978-1-6684-8582-8.ch013

#### INTRODUCTION

The planning phase is the first phase of our Systems Development Life Cycle of the mobile application. Due to the complexity of mobile application development, preparation is crucial to project success. Failure to plan an application can result in an unclear concept and insufficient data (Frajtak et al., 2015)(Maqbool et al., 2019). Not to mention the potential delays and extra costs that can arise from poor organization, planning, and communication. More specifically, unforeseen changes, adjustments, and errors are costly and can lead to costly rework, delays, and even project failure (CodePlex Archive, Oct. 2019). For the planning phase, we need to make sure to complete certain tasks and objectives in order to have a complete SDLC project, later on, to be able to spot possible problems before they have an effect on the development process if they make a thorough plan for the upcoming development cycle (Nazir et al., 2017). A study and justification of the procurement management strategy are important in order to get the entire organization on board for the project. To read all the resources necessary (Ahmed et al., 2017) (Umuhoza et al., 2015).

Develop and refine the project's scope, timetable, risk profile, and costs. These ties into getting the resources ready for the project. Having completed the scope and timetable it will get into view if the project will be ready when needed and at minimum what resources will be needed to procure. The risk profile and costs will determine if the project is worth pursuing on the established constraints (Huang et al., 2018)(Roubi et al., 2015). Evaluate and explain procedures for coordinating related support plans. Establish common goals and objectives. Establishing common goals and objectives is the first step in coordinating related support plans. To do this, it is necessary to understand the wishes and needs of the project and to explain in detail what kind of support is needed. Creating an action plan is the next step. After establishing common goals and objectives, a strategy should be developed. This plan should include a schedule of when tasks will be completed, who will be responsible for them, what resources will be needed, etc. (Ambriola et al., 2006). Progress should be tracked regularly to ensure that the plan is being implemented as intended and that goals are being met. This should include feedback from the client of the project. We also will need to brainstorm for possible ideas ahead of time and select the best idea among the possible solutions.

Among other things, in order for the project to succeed we must make sure the following tasks are also considered, planned for, and completed:

- Review possible application development companies and their services, if we intend to get a third party to develop our application
- From that third party, discuss price and delivery with the selected vendor

## 16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart"

button on the publisher's webpage: www.igi-

global.com/chapter/sdlc-phases-of-a-mobile-

application/322073

#### Related Content

#### E-Commerce and Mobile Commerce Applications Adoptions

Charlie Chenand Samuel C. Yang (2009). *Mobile Computing: Concepts, Methodologies, Tools, and Applications (pp. 1615-1625).* 

www.irma-international.org/chapter/commerce-mobile-commerce-applications-adoptions/26611

### Biogeography-Based Optimization Applied to Wireless Communications Problems

Sotirios K. Goudos (2019). Advanced Methodologies and Technologies in Network Architecture, Mobile Computing, and Data Analytics (pp. 746-762).

 $\frac{\text{www.irma-international.org/chapter/biogeography-based-optimization-applied-to-wireless-communications-problems/214658}$ 

#### System Usability Scale Implementation for Interfaces on Mobile Touch Screen Devices Assessment

Svetlana ievi, Slobodan Mitrovi, Milkica Nešiand Andreja Samovi (2016). *Critical Socio-Technical Issues Surrounding Mobile Computing (pp. 137-167).* 

www.irma-international.org/chapter/system-usability-scale-implementation-for-interfaces-on-mobile-touch-screen-devices-assessment/139562

#### Lightweight Opportunistic Mobile Data Offloading

Sanjit Kumar Dash, Aiswaryalaxmi Pradhan, Sasmita Mishraand Jibitesh Mishra (2018). *International Journal of Mobile Devices, Wearable Technology, and Flexible Electronics (pp. 1-15).* 

www.irma-international.org/article/lightweight-opportunistic-mobile-data-offloading/227062

#### Business Model Typology for Mobile Commerce

Volker Derballa, Key Pousttchiand Klaus Turowski (2009). *Mobile Computing: Concepts, Methodologies, Tools, and Applications (pp. 2169-2178).*www.irma-international.org/chapter/business-model-typology-mobile-commerce/26657