

Architectural Drivers Specification

**Version1.1**

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**25/11/2019**

**VERSION HISTORY**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Version #** | **Implemented**  **By** | **Revision**  **Date** | **Approved**  **By** | **Approval**  **Date** | **Reason** |
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# Introduction

* 1. **Purpose**

This document will be used to refine the architectural drivers for the project. This document will act as the main repository of requirements for the project.

The intended audience for this document is the Hello World team and BDS project.

* 1. **Definitions, Acronyms and Abbreviations**

1. **Project Overview**

BDS project will delivery a software used to manage real estate company. The software running on this 2 platforms is ios, android and web adminnistrator, this software use the same database to save and query data.

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# Architectural Drivers Overview

The architectural drivers presented in this document include:

* **Functional Requirements:** These requirements are presented in the form of specifications and use cases. These are a refinement of the requirements documented in the requirements specification document.
* **Quality Attribute Requirements:** These requirements are presented in the form of quality attribute scenarios. These scenarios are based on the quality attributes documented in the requirements specification document.
* **Business Constraints:** These are the business constraints in the requirements specification document.
* **Technical Constraints:** These are the technical constraints in the requirements specification document.

These architectural drivers will influence the architectural design and implementation of the project. Additionally, they will impact the schedule and quality of the project. As a whole these architectural drivers define the scope of the project.

# Functional Requirements



# Quality Attribute Scenarios

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of scenario:** Users use the app to easier | | **ID:** QA1 | **Version:** 1 |
| **Last Changed:** 27/11/2019 |
| **Quality attribute:** Usability | | **Characterization ID:** QA1 | |
| **Describe stakeholder role proposing the description:** User, customer, team develope | | | |
| Source(s) of the stimulus | Internal to the system | | |
| Stimulus | Need for the app to allow user easy to use the app easier (feel comfortable) | | |
| Relevant environmental conditions | Design time, run time | | |
| Architectural elements | Views | | |
| System response | The architectural designer design interface visually arrange options, text visual elements, view is evident to users easily observe and manipulate | | |
| Response measure(s) | The interface will be as few words as possible, the font is clear, simple colors, the layout is easy to see, the user manipulates less | | |
| Associated risks | N/A | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of scenario:** Users use the app faster | | **ID:** QA2 | **Version:** 1 |
| **Last Changed:** 27/11/2019 |
| **Quality attribute:** Performance | | **Characterization ID:** QA1 | |
| **Describe stakeholder role proposing the description:** User, customer, team develope | | | |
| Source(s) of the stimulus | Internal to the system | | |
| Stimulus | Need for the app to allow users use and access data faster | | |
| Relevant environmental conditions | Run time | | |
| Architectural elements | Model, controller | | |
| System response | The application is designed with strong database, quick access, optimized source code | | |
| Response measure(s) | Users manipulate and retrieve data as quickly as possible. turn pages under 3 seconds, see graphs and compare data under 5 minutes | | |
| Associated risks | N/A | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title of scenario:** The system complies with user requests | | **ID:** QA3 | **Version:** 1 |
| **Last Changed:** 11/28/2019 |
| **Quality attribute:** Testability | | **Characterization ID:** QA03 | |
| **Describe stakeholder role proposing the description:** Users, customer & tester | | | |
| Source(s) of the stimulus | Users, customer & system verifier | | |
| Stimulus | Analysis, architecture, design, code, system delivered | | |
| Relevant environmental conditions | At design time, at development time, at deployment time, at test time | | |
| Architectural elements | System | | |
| System response | The system will work correctly with architecture, design, code, system delivered & function. | | |
| Response measure(s) | Report the execution rate of 95% or more when running the test, the data returned is true to architecture, design, code, system delivered & function. | | |
| Associated risks | In the process of handing over the user & customer product, the team will be notified when the error occurs and the time to fix the error depends on the function or function development. | | |

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| --- | --- | --- | --- |
| **Title of scenario:** Users can use the application on two platforms | | **ID:** QA04 | **Version:** 1 |
| **Last Changed:** 11/28/2019 |
| **Quality attribute:** Portability | | **Characterization ID:** QA04 | |
| **Describe stakeholder role proposing the description:** User & Customer | | | |
| Source(s) of the stimulus | User & Customer | | |
| Stimulus | Allow users to use on IOS & Android platforms | | |
| Relevant environmental conditions | High-tech and networked phone. | | |
| Architectural elements | System | | |
| System response | Use native react language to program on IOS & Android platforms | | |
| Response measure(s) | Data is synchronized on two platforms, the language is used on two platforms | | |
| Associated risks | The system will not work when there is no network | | |

# Contrainst

* 1. **Technical contraints**

|  |  |
| --- | --- |
| **Consideration** | **Technical Constraint** |
| Platform | Use for 3 platform, IOS vs android for mobile app, web application for admin. |

* 1. **Business contraints**

|  |  |
| --- | --- |
| **Consideration** | **Business constraint** |
| **BR1** | When employees leave, the account will be hidden. |
| **BR2** | Staff only view and register applications |
| **BR3** | Only the administrator can update the information |
| **BR4** | Only director can approve employee applications |
| **BR5** | Unapproved applications will be canceled and not saved in history |
| **BR6** | Admin to update information continuously or when there is information from leaders and departments |
| **BR7** | Admin cannot use App Mobile to import files, etc. |