**ITWorks – Database Development Plan**

**(for Client)**

**Client Company Name:** **Shopping World**

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Version: 1.0

Date: 23/03/2023

Status: Draft

**For more information**

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| **Client Company Contact:** |  |
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**Revision History:**

|  |  |  |  |
| --- | --- | --- | --- |
| Version | **Date** | **Author(s)** | **Change Description** |
| 1.0 | 22/03/2023 | Andre Alexandrov | *First draft.* |
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Contents

[2 Introduction 3](#_Toc103554352)

[3 Database Development Plan Objectives 3](#_Toc103554353)

[4 Scope 3](#_Toc103554354)

[5 Milestone, subtasks and timeline 3](#_Toc103554355)

[6 Reviews with client 6](#_Toc103554356)

[7 Performance Tuning using Indexes 6](#_Toc103554357)

[8 Approvals 6](#_Toc103554358)

# Introduction

This section specifies the background information about the client company *(ShoppingWorld)* MongodB document.

It documents the plan for designing and implementing a prototype using the MongoDB Atlas will be covered for this document.

MongoDB Atlas cluster database deployed:

* Version: 5.0.15
* Region: AWS/ Sydney
* Cluster name: Cluster0
* Database name: ShoppingWorld

# Database Development Plan Objectives

This section specifies database development plan document objectives which defines the stages of the development involved from planning, requirement gathering ,… ,… , To implementation for a prototype.

In this section list at least three benefits of having a development plan. (Approx. 30 words)

Having a development plan helps making sure a product Is delivered on time, it is also a benefit by giving a ridged structure for development making sure every aspect is done, it also gives performance and progress indicators.

# Scope

* This section describes the overall scope of the database development. (Note: watch the requirements video, it covers what tasks involved and what tasks are not involved in the development. (Approx. 80 words)

# Milestone, sub-tasks, timeline & resources

* This section describes all tasks and subtasks with the time and resources used.
* In the major tasks include the four stages. Each stage, you must include the time spend for researches, consultation/confirmation/review with client and the database tasks involved.
* For each major stage, suggest at least three tasks to be carried out with the dates and resources needed. Resources may include vendor software, reference materials, special hardware needed.

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| --- | --- | --- | --- | --- | --- |
| Task ID | Milestone / Major tasks/ subtasks | Date start | Date end | Resources needed | Review comments |
|  | Stage1: Requirements gathering, product selection and planning the database development | 27/02/2023 | 13/03/2023 |  |  |
| 1 | Find Business requirements and applications to be used |  |  | Word |  |
| 2 | Explain SQL vs noSql |  |  | Word |  |
| 3 | Explain data stores |  |  | Word |  |
| 4 | Databases for datastores |  |  | Word |  |
| 5 | Determine database product |  |  | Word |  |
| 6 | Determine scaling |  |  | Word |  |
| 7 | Create schema diagram |  |  | Hackolade |  |
| 8 | Finish Development Plan |  |  | Word |  |
|  | Stage 2: Database setup, validation schema and data manipulation | 19/03/2023 | 31/03/2023 |  |  |
| 9 | Create MongoDB Account | 20/03/2023 | 20/03/2023 | Mongo Atlas |  |
| 10 | Create collections and database | 20/03/2023 | 20/03/2023 | mongosh |  |
| 11 | Insert into mongo compass | 24/03/2023 | 24/03/2023 | MongoDB compass |  |
| 12 | Write query statements | 25/03/2023 | 25/03/2023 | MongoDB compass |  |
| 13 | Schema validation | 26/03/2023 | 27/03/2023 | MongoDB compass |  |
| 14 | unstructured schema | 27/03/2023 | 29/03/2023 | MongoDB compass |  |
| 15 | Update and delete documents | 30/03/2023 | 31/03/2023 |  |  |
|  | Stage 3: Queries design, indexing and partitioning/sharding | 31/03/2023 | 19/05/2023 |  |  |
| 16 | Retrieve and implement time-to-live | 31/03/2023 | 02/04/2023 |  |  |
| 17 | Multi users and implement Sharding | 02/04/2023 | 10/04/2023 |  |  |
| 18 | Analyse through put |  |  |  |  |
| 19 |  |  |  |  |  |
| 20 |  |  |  |  |  |
| 21 |  |  |  |  |  |
|  | Stage 4: REST APIs & Database Documentation | 19/05/2023 | 16/06/2023 |  |  |
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# Scheduled meetings with client

* This section describes when to meet the client to report the progress and obtain the review/feedback from client.
* Give specific dates to meet the client, name of the major stage, ITWorks DB designer, & the name of the client representative to meet

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| --- | --- | --- | --- |
| Proposed date | Name of the major stage to review | Name of the client Representative | Name of ITWorks database designer |
| 13/03/2023 |  | Joe Black | Andre Alexandrov |
| 27/03/2023 |  | Joe Black | Andre Alexandrov |
| 15/05/2023 |  | Joe Black | Andre Alexandrov |
| 12/06/2023 |  | Joe Black | Andre Alexandrov |

# Changes suggested from clients

Nil (at the planning stage)

* This section records the changes being raised.
* No need to fill at the initial planning stage.
* Need to record the changes when there is a request from client.

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| --- | --- | --- | --- |
| Date requested the changes | Changes to be made | Name of the client representative | Actions to be taken |
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# Approvals

|  |  |  |
| --- | --- | --- |
| **Name and signature** | **Title** | **Date** |
|  |  |  |
| **1.** |  |  |
|  |  |  |
| **2.** |  |  |