Team 3

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Team Members

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Document Control

Change History

```
Revision Change Date Description of changes
V1.0 06/12/2019 Initial release^
V2.0 03/01/2020 Final release
```

Document Owners

Senapathige Sahas and Toth Mihai Valentin are responsible for developing and maintaining this document.

```
Version 1.
```

Table of Contents

1 Overview

1.1 Purpose and Scope

Allow students and teachers to use an in-house messaging app for the exchange of information related to the school or external activities.

The application is required to provide a simple interface for sending messages. As mentioned in the objectives section above, the delivered product should demonstrate the ability to provide proper communication end-to-end and broadcast users.

```
Version 1.
```

1.2 Goals and Objectives

Objectives: the general objective is to provide an alternative way to exchange information. It is expected:

- an interface developed with JFrame that allows access to the user;
- simple and intuitive operation.

- simple connection to other chat members

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```

1.3 Project Deliverables

Date Deliverable

```
08/10/2019 Subdivisions of tasks within the group and client
initialization
25/10/2019 Chat project introduction
15/11/2019 Added code of client and server
Technical Prototype
18/11/2019 Finishing developing graphic part
29/11/2019 Developed code of the client: added all packages
01/12/2019 New GUI. Rivisited the first version.
04/12/2019 Implemented chat group
12/12/2019 Improved structure of code
20/12/2019 Code ready to be presented and released
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```

1.4 Assumptions and Constraints

1.4.1 Assumptions

1. The client should connect to the server.

2. The client should interact with the server to exchange messages in a public and private chat .Interfacing the app with a proxy server and third-party website is feasible.

3. The client should have a graphical interface

1.4.2 Constraints

Constraints:

1. Use TCP protocol.

2. Client must connect with every TCP server.

3. Generate the packages wanted by the server.

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2 Startup Plan

2.1 Team Organization

Role Actor(s) Responsibility

```
Project Manager Er Raqioui.
Bachir
Call team meetings, coordinate communications
within group, coordinate communications
outside group, break out tasks, assign them to
teammates
Developer Bachir Develop software based on requirement and
architect specifications
Programmer Bachir,
Montresor,
Senapathige,
Er Raqioui,
Toth
Program to requirement and architect
specifications
Tester Bachir,
Montresor,
Senapathige,
Er Raqioui,
Toth
Write test cases, perform unit testing of test
cases against incremental release of code,
perform integrated testing of test cases against
incremental release of code, report issues
Architect Bachir Specify overall internal workings of application
Requirement
Engineer
Bachir,
Montresor,
Senapathige,
Er Raqioui,
Toth
Outline and document project dependencies and
requirements. This includes internal and external
dependencies.
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```

2.2 Project Communications

Event Information Audience Format Frequency

```
Team
Meeting
Task status: completed
since last meeting &
planned for next;
obstacles encountered;
change requests in
process
All team
members
Informal meetings
during class
hours; Formal
meetings as
needed; Updates
and problems via
TeamSpeak or
Discord
As needed
Project
Status
Report
Review finished items,
status of prototype;
review any problems,
schedule slippage,
programming issues
All team
members,
customer
Message on
Whatsapp or
notes in GitHub’s
commit
Iteration
Closeout
```

2.3 Technical Process

An iterative and incremental development process is planned. Feedback will be used from each iteration to improve the next. The first iteration will focus on basic functionality of the application. Subsequent iterations will build upon that and incorporate more features as time allows.

2.4 Tools

```
● Programming & Markup Languages – Java, XML
● Operating System – Windows 8.1/
● Version Control – all work products will be stored in an SVN repository
● Development Tools – Netbeans
● Presentation – Google Presentation
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```

3 Control Plan

3.1 Monitoring and Control

The following list of dates includes formal reviews outside of the Communication Plan. Milestones are included to reference where the project is scheduled to stand as these reviews occur:

Date Review / Milestone

```
10/11/2019 Milestone: Technical Prototype Complete
17/11/2019 5-Minute Status Report
18/11/2019 Manager's Briefing
26/11/2019 Milestone: Iteration #1 Complete
11/12/2019 Milestone: Test Report Complete
13/12/2019 Inspection
15/12/2019 Milestone: Iteration #2 Complete
18/12/2019 Milestone: Product Released
21/12/2019 Final Presentations
```

3.2 Configuration Management Plan

The following procedure is to be used when making changes to all baselined work products:

1. All project work products will be stored in a centralized SVN repository running on a central server (GitHub).

2. All baselined documents will have a Document Control section with a change history to track initialization and subsequent changes.

3.All project work products (documents, source code, test cases, program data, test data, etc) will be stored in the SVN repository but not all will be under change control (subject to formal change control procedures.) Only the system requirements, project plan and source code will be baselined and under configuration control.

4.Items that are subject to change control will be considered baselined after a group review at the end of the initial document creation.

5.The change control procedure once a product is baselined is: (1) anyone wanting to make a change to a baselined item sends a message to the rest of the team describing the change, reason for the change.

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(2) if no one responds to the group within 2 hours with a reason for why the change request shouldn't be permitted, it will be considered accepted and the person proposing the change may proceed with the change. (3)if anyone does object to the change, the reason for objecting will be discussed at a meeting on TeamSpeak or Discord where everyone is invited to attend and voice their opinion. At the end of the meeting a democratic vote will be held to decide whether or not the change should be allowed. (4)if a change takes place, the initiator must collaborate with the project manager to update the schedule

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4 Supporting Process Plans

4.1 Risk Management Plan

Rank Risk Probability of Loss Size of Loss Risk Exposure Response

```
1 Schedule / time line delivery
Likely Major High Mitigate: Stick to the
schedule.
2 ManageMyID
website changes
HTML layout
Likely Moderate Moderate Avoid: Breaking the
parsing engine out into a
separately hosted server
allows for fixes to occur in
one place, instantly for all
users, and with minimal
intrusion.
3 Learning curve
for new tools and
technologies
longer than
```

```
expected
Unlikely Moderate Moderate Buy Information: Begin
working on a basic
prototype early to test
out fundamental
programming concepts &
knowledge
4 Data feed not
available from
ManageMyID
website
Unlikely Minor Low Avoid: Instead of using a
feed from ManageMyID,
depend upon logging into
the site, and pull relevant
information from HTML
fields.
```

4.2 Test Plan

The test plan defines the items that will be tested, methods for testing.

4.3 Product Acceptance Plan

At the conclusion of each iteration, the prototype created will tested to ensure it meets the requirements of that iteration. An environment such as the iPhone simulator may be used to test functionality in lieu of the app being loaded on an actual smartphone.

For the final iteration, product acceptance testing will ensure that the prototype functions as expected with a user's data.