Touch Screen Kiosk at JOOLA Table Tennis Club. High Level Requirements.

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1. Introduction

The document holds the high level requirements only. It is a start point for both system architecture and low level requirements.

The requirements are divided into a few logical groups. Later on the requirements should be grouped on a time line bases: what should be covered by the first software release, what by the second release and so on.

2. General Requirements

- 2.1 The kiosk software must be a GUI application.
- 2.2 A touch screen must be the only input device sufficient for providing normal operations. An optional regular keyboard and mouse may be used for service purposes.
- An out of the shelf hardware should be used. 2.3
- 2.4 Simultaneous operating of many kiosks must be supported.
- 2.5 Automatic data synchronization between many kiosks must be supported regardless which kiosk was used for data input in case of many kiosks.
- 2.6 The automatic data synchronization between many kiosks may not work if the local area network connection is down.
- 2.7 The kiosk software data storage must be centralized.
- 2.8 The data storage must reside on the club web site host.
- 2.9 The data exchange between the kiosk software and the data storage must be done via retrieving certain web pages.
- 2.10 The kiosk software may not work if a connection to the club web site is down.
- 2.11 The kiosk software must support various touch screen resolutions.

3. Players Requirements

- 3.1 The kiosk software must keep track of all the players who played any kind of events at the club at least once.
- 3.2 There must be no limitations on the number of players the kiosk software keeps track of.
- A player must be able to update personal information via the club web site. 3.3
- 3.4 A player must be able to upload his/her picture to his/her profile.
- 3.5 A player must be able to upload unlimited number of other pictures to his/her profile.
- 3.6 A player profile must also be able to store other personal player information including but not limited to a date of birth, USA TTF Player ID, e-mail addresses, phone number, comments etc.
- 3.7 The kiosk software must be able to display player personal information.

- 3.8 It must be possible to register a new player via the kiosk software.
- 3.9 It must be possible to register a new player via the club web site.
- 3.10 A registered player might or might not be a member of USA TTF.
- 3.11 If a registered player is a member of USA TTF or became a member after the registration the kiosk software must keep track of his/her official rating.
- 3.12 The minimum required information to be registered is a player name and last name.
- 3.13 The kiosk software must be able to display a player statistics which includes but not limited to a chart of the official rating changes, best results, official competitions played etc.
- The kiosk software must be able to display a history of matches for a certain player against 3.14 another player including both official and non-official competitions.
- 3.15 The kiosk software must be able to print a player statistics.
- 3.16 The kiosk software must be able to print a player personal information.
- The kiosk software must be able to print a player history records against a certain player. 3.17
- 3.18 In case of pair games the kiosk software must be able to display personal information for two players simultaneously.

4. Events / Score Requirements

- 4.1 The kiosk software must keep track of the club events
- 4.2 The kiosk software must keep track of matches for each the club event.
- There must be no limits on the number of matches the kiosk software keeps track of. 4.3
- 4.4 The kiosk software must support events for singles.
- 4.5 The kiosk software must support events for pairs.
- 4.6 The kiosk software must support round robin events.
- 4.7 The kiosk software must support round robin events followed by play offs.
- 4.8 The kiosk software must support play offs events.
- 4.9 Each event can be best of arbitrary number of games.
- 4.10 The kiosk software must support both official USA TTF events and routine club events.
- 4.11 In case of the official USA TTF events the only system administrator is able to input the games scores.
- 4.12 In case of routine club events anybody must be able to input the games score.
- The past games results correction must be available for the system administrator only. 4.13
- 4.14 The kiosk software must support many events for the same date.
- 4.15 The system administrator must be able to create a new current event.
- 4.16 The kiosk software must support printing any event results.
- 4.17 The kiosk software must support sending any event results to a certain e-mail address.
- 4.18 The kiosk software must be able to display results of any event.
- The kiosk software must be able to retrieve USA TTF events results from their web site. 4.19
- 4.20 The kiosk software might support other kind of events.
- 4.21 The kiosk software must remember the player rating at the time of a certain game.

5. Other Requirements

- 5.1 The kiosk software must keep track of inactivity time.
- 5.2 As soon as inactivity time exceeds a configurable limit the kiosk must switch to the idle state.
- 5.3 While being in the idle state the kiosk must display a slide show or videos.
- While being in the idle state any touch of the display must lead to the start screen. 5.4
- 5.5 The pictures for idle state slide show must be taken from a configurable local file system path.
- 5.6 The videos for the idle state must be taken from a configurable local file system path.
- 5.7 The choice between a slide show and videos must be random.
- 5.8 The kiosk software must supports skins i.e. different styles of drawing control elements and displaying information.
- 5.9 A skin must be a description file in opposite to a source code file.
- 5.10 The number of network transactions should be reduced as much as possible.
- 5.11 The kiosk software must support administrative mode.
- 5.12 Switching to administrative mode must be password protected.
- 5.13 Switching from administrative mode must be done by an explicit administrator action or automatically basing on a configurable inactivity timer.
- 5.14 The only administrative mode must allow changing non-current event matches and games score.
- 5.15 There are no requirements to the reliability of the software.
- There are no requirements to backing up the kiosk data store. 5.16
- 5.17 The kiosk software must support GUI internationalization.