Touch Screen Kiosk

at

JOOLA Table Tennis Club.

High Level Requirements.

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# 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.

# General Requirements

* 1. The kiosk software must be a GUI application.
  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.
  3. An out of the shelf hardware should be used.
  4. Simultaneous operating of many kiosks must be supported.
  5. Automatic data synchronization between many kiosks must be supported regardless which kiosk was used for data input in case of many kiosks.
  6. The automatic data synchronization between many kiosks may not work if the local area network connection is down.
  7. The kiosk software data storage must be centralized.
  8. The data storage must reside on the club web site host.
  9. The data exchange between the kiosk software and the data storage must be done via retrieving certain web pages.
  10. The kiosk software may not work if a connection to the club web site is down.
  11. The kiosk software must support various touch screen resolutions.

# Players Requirements

* 1. The kiosk software must keep track of all the players who played any kind of events at the club at least once.
  2. There must be no limitations on the number of players the kiosk software keeps track of.
  3. A player must be able to update personal information via the club web site.
  4. A player must be able to upload his/her picture to his/her profile.
  5. A player must be able to upload unlimited number of other pictures to his/her profile.
  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.
  7. The kiosk software must be able to display player personal information.
  8. It must be possible to register a new player via the kiosk software.
  9. It must be possible to register a new player via the club web site.
  10. A registered player might or might not be a member of USA TTF.
  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.
  12. The minimum required information to be registered is a player name and last name.
  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.
  14. The kiosk software must be able to display a history of matches for a certain player against another player including both official and non-official competitions.
  15. The kiosk software must be able to print a player statistics.
  16. The kiosk software must be able to print a player personal information.
  17. The kiosk software must be able to print a player history records against a certain player.
  18. In case of pair games the kiosk software must be able to display personal information for two players simultaneously.

# Events / Score Requirements

* 1. The kiosk software must keep track of the club events
  2. The kiosk software must keep track of matches for each the club event.
  3. There must be no limits on the number of matches the kiosk software keeps track of.
  4. The kiosk software must support events for singles.
  5. The kiosk software must support events for pairs.
  6. The kiosk software must support round robin events.
  7. The kiosk software must support round robin events followed by play offs.
  8. The kiosk software must support play offs events.
  9. Each event can be best of arbitrary number of games.
  10. The kiosk software must support both official USA TTF events and routine club events.
  11. In case of the official USA TTF events the only system administrator is able to input the games scores.
  12. In case of routine club events anybody must be able to input the games score.
  13. The past games results correction must be available for the system administrator only.
  14. The kiosk software must support many events for the same date.
  15. The system administrator must be able to create a new current event.
  16. The kiosk software must support printing any event results.
  17. The kiosk software must support sending any event results to a certain e-mail address.
  18. The kiosk software must be able to display results of any event.
  19. The kiosk software must be able to retrieve USA TTF events results from their web site.
  20. The kiosk software might support other kind of events.
  21. The kiosk software must remember the player rating at the time of a certain game.

# Other Requirements

* 1. The kiosk software must keep track of inactivity time.
  2. As soon as inactivity time exceeds a configurable limit the kiosk must switch to the idle state.
  3. While being in the idle state the kiosk must display a slide show or videos.
  4. While being in the idle state any touch of the display must lead to the start screen.
  5. The pictures for idle state slide show must be taken from a configurable local file system path.
  6. The videos for the idle state must be taken from a configurable local file system path.
  7. The choice between a slide show and videos must be random.
  8. The kiosk software must supports skins i.e. different styles of drawing control elements and displaying information.
  9. A skin must be a description file in opposite to a source code file.
  10. The number of network transactions should be reduced as much as possible.
  11. The kiosk software must support administrative mode.
  12. Switching to administrative mode must be password protected.
  13. Switching from administrative mode must be done by an explicit administrator action or automatically basing on a configurable inactivity timer.
  14. The only administrative mode must allow changing non-current event matches and games score.
  15. There are no requirements to the reliability of the software.
  16. There are no requirements to backing up the kiosk data store.
  17. The kiosk software must support GUI internationalization.