

US008515253B2

(12) United States Patent

Cottrell

(10) Patent No.: US 8,515,253 B2 (45) Date of Patent: Aug. 20, 2013

(54) SYSTEM AND METHOD FOR AUTOMATED CREATION OF VIDEO GAME HIGHLIGHTS

- (75) Inventor: **David Cottrell**, Foster City, CA (US)
- (73) Assignee: Sony Computer Entertainment America LLC, San Mateo, CA (US)
- (*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35

U.S.C. 154(b) by 802 days.

- (21) Appl. No.: 12/370,327
- (22) Filed: Feb. 12, 2009

(65) **Prior Publication Data**

US 2009/0208181 A1 Aug. 20, 2009

Related U.S. Application Data

- (60) Provisional application No. 61/029,261, filed on Feb. 15, 2008.
- (51) Int. Cl. *H04N 5/93* (2006.01)

(56) References Cited

U.S. PATENT DOCUMENTS

5,795,228	A 8/	1998	Trumbull et al 463/42
5,857,190	A 1/	1999	Brown 707/10
6,257,982	B1 7/	2001	Rider et al 463/31
6,634,949	B1 10/	2003	Briggs et al 463/42
6,699,127	B1 * 3/	2004	Lobb et al 463/43
6,999,083	B2 2/	2006	Wong et al 345/473
7,824,268	B2 * 11/	2010	Harvey et al 463/42
.002/0087595			Friedman et al 707/512

2003/0038805 A1*	2/2003	Wong et al 345/473
2003/0078103 A1*	4/2003	LeMay et al 463/43
2004/0040041 A1*	2/2004	Crawford 725/88
2004/0073536 A1*	4/2004	Smith-Semedo et al 707/2
2008/0066111 A1*	3/2008	Ellis et al 725/57
2008/0086688 A1*	4/2008	Chandratillake et al 715/719

OTHER PUBLICATIONS

Changsheng Xu et al,Live Sports Event Detection Based on Broadcast Video and Web-casting Text,Institute for Infocomm Research, 21 Heng Mui Keng Terrace, Singapore 119613.*

Hanjalic, A et al, Generic approach to highlights extraction from a sport video Image Processing, 2003. ICIP 2003. Proceedings. 2003 International Conference on (vol. 1), pp. I-1-4 vol. 1.*

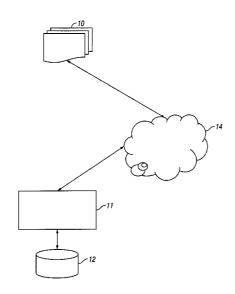
* cited by examiner

Primary Examiner — Peter Shaw
Assistant Examiner — Ali Shayanfarali Shayanfar
(74) Attorney, Agent, or Firm — Martine Penilla Group LLP

(57) ABSTRACT

Automated creation of videos for interactive entertainment, such as video game highlights, may be based on events that occur within that entertainment, for example based on video game events. A series of events that can occur within a play session may be designated. The game keeps track of sufficient replay data such that these discrete events can be identified. Upon replay generation, the game searches over the historical data for that session and identifies the events that have occurred. The game may present several combinations of views of those events. For example, the game can create a highlights reel of the entire play session by linearly displaying several of the discovered events, or the highlights from several games can be selected by one or more individuals to generate a "highlights of highlights" video. Another embodiment allows the player, or group of players or other individuals, to choose which events to view. The events could also be categorized, allowing the player to view a collection of a selected event type, such as all flag capture videos or all long-distance shots.

21 Claims, 13 Drawing Sheets



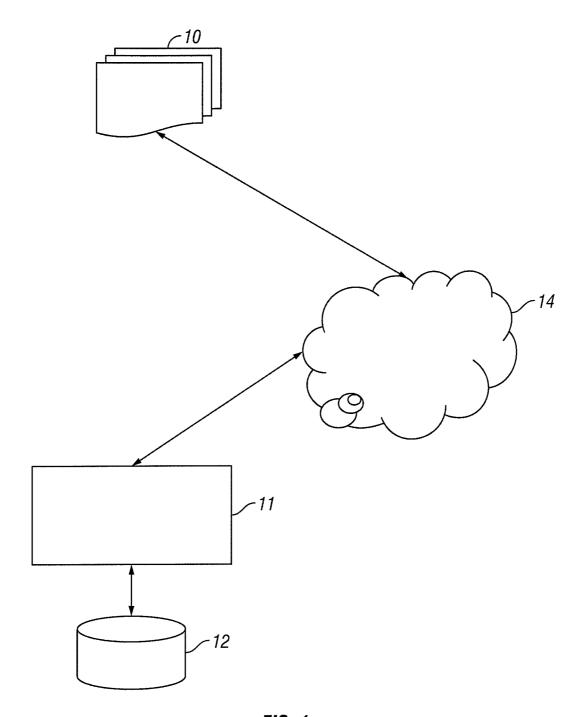


FIG. 1

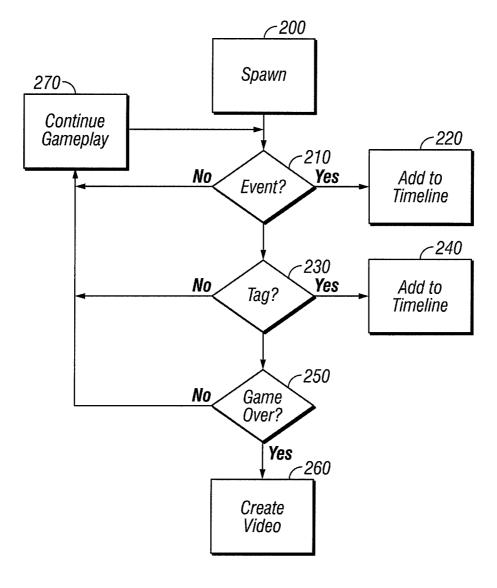


FIG. 2

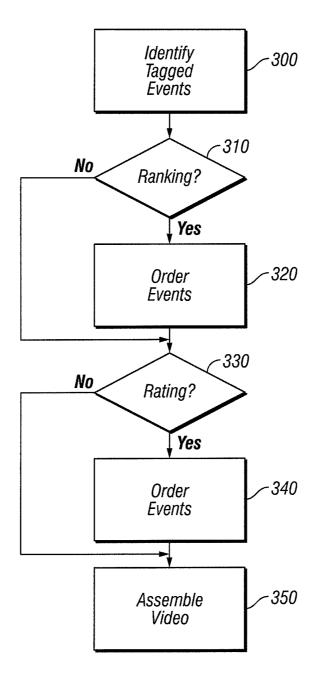
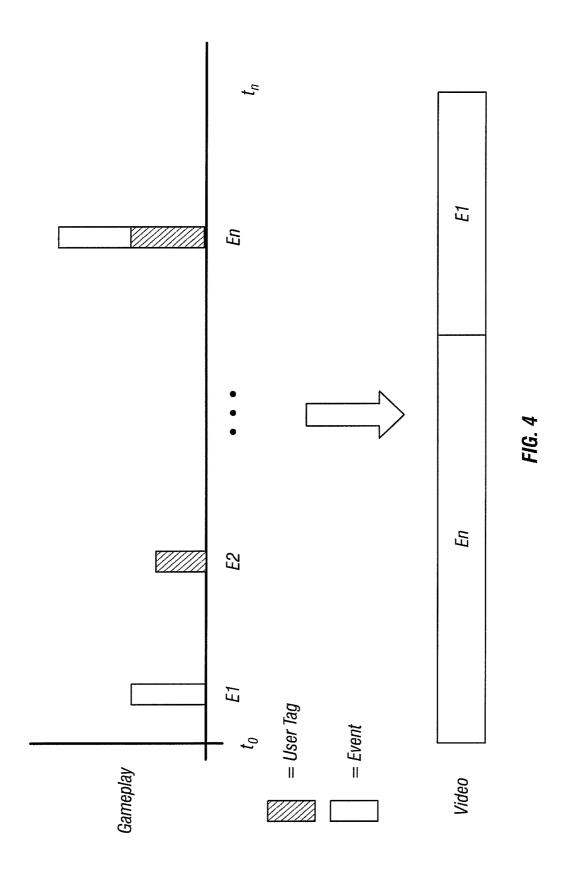
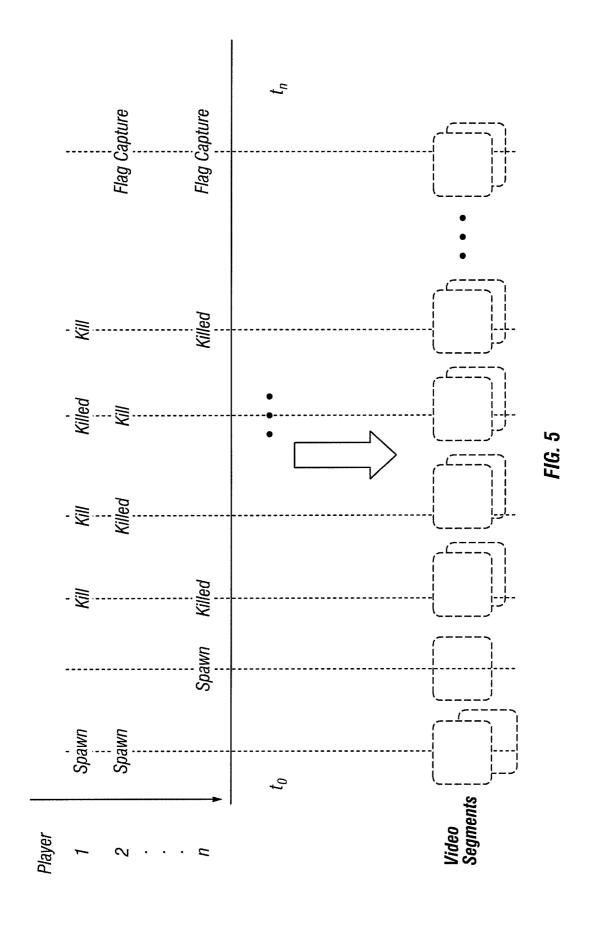


FIG. 3



Aug. 20, 2013



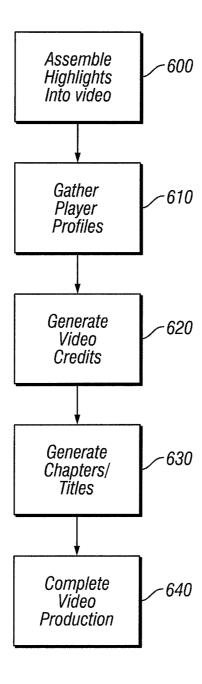


FIG. 6

Player 1 Spawns

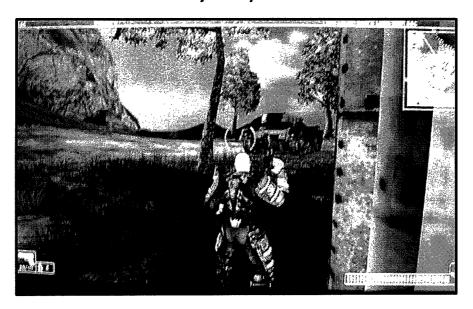


FIG. 7A

Player 1 Picks up mines

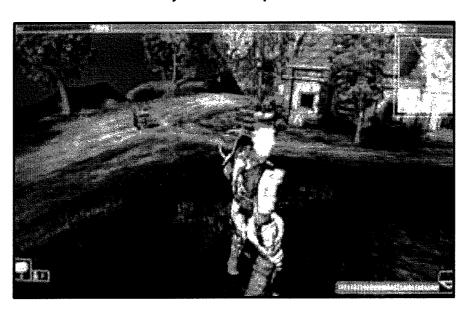


FIG. 7B

Player 2 Spawns



FIG. 7C

Player 2 Enters Jeep

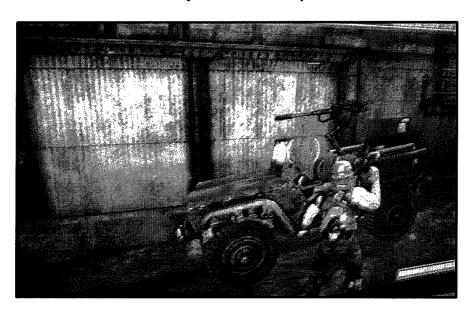


FIG. 7D

Player 1 Lays down mine

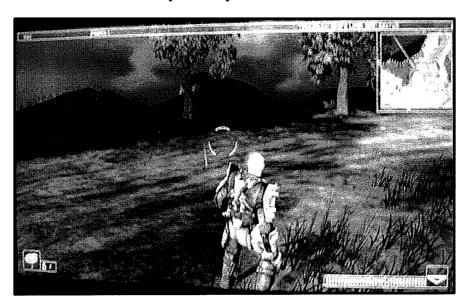


FIG. 7E

Player 2 Drives in mine path

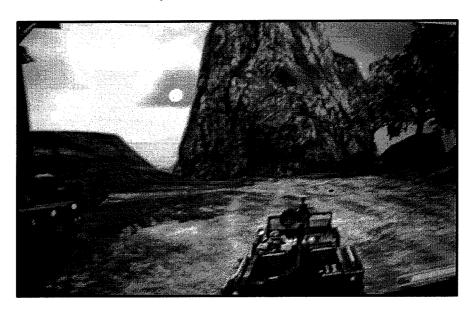


FIG. 7F

Player 1 watches player 2 blowup on the mine



FIG. 7G

Player 2's body shown

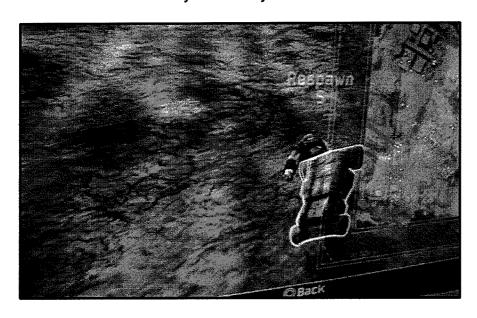


FIG. 7H

P1 Spawn

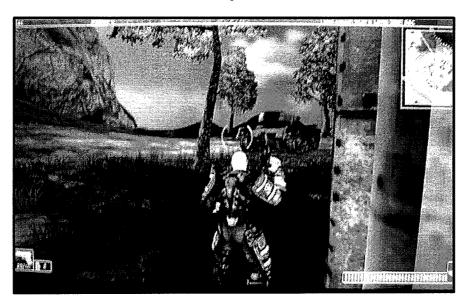


FIG. 7I
P1 Picks up mines, Player 2 spawns in Picture in Picture image (PIP)

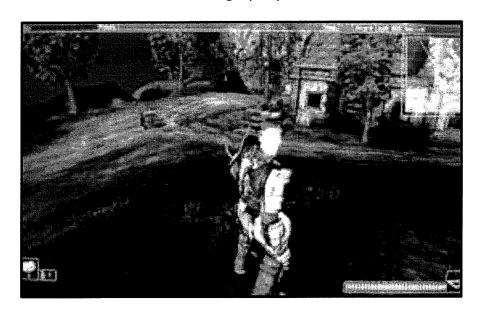


FIG. 7J

Player 1 Lays down mine, Player 2 enters jeep in PIP



FIG. 7K

Player 2 Drives in mine path

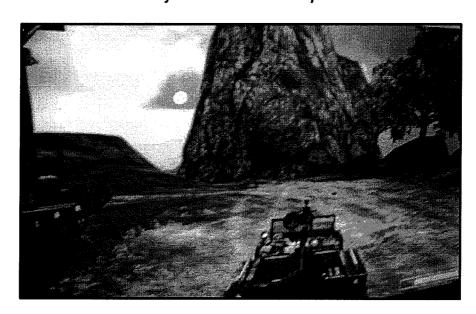


FIG. 7L

Player 1 watches player 2 blowup on the mine

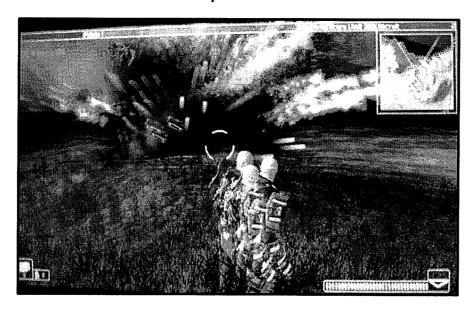


FIG. 7IVI

Player 2's body shown

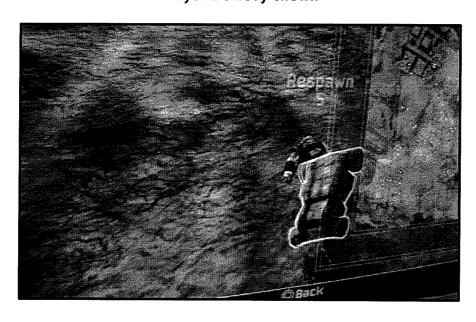


FIG. 7N

SYSTEM AND METHOD FOR AUTOMATED CREATION OF VIDEO GAME HIGHLIGHTS

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority to U.S. Provisional Patent Application Ser. No. 61/029,261, filed 15 Feb. 2008, which application is incorporated herein in its entirety by this reference thereto.

FIELD OF THE INVENTION

Embodiments of this invention relate to the creation of videos for interactive entertainment. More particularly, 15 embodiments of this invention relate to the automated creation of videos for interactive entertainment based on events that occur within that entertainment.

BACKGROUND OF THE INVENTION

Multiplayer video games, such as the Warhawk game, which is played on the Sony PS3 game console (see, for example, www.us.playstation.com/Warhawk/) provide an interactive entertainment experience. Such interaction typi- 25 cally takes the form of a competitive group or team activity. For example, in Warhawk such interaction takes place during a virtual combat experience. Certain events during any particular game play sequence are memorable to the game participants because of, for example, the skill exhibited by one or 30 more participants during such event or the entertainment value of such event. Thus, YouTube currently shows 1580 postings of Warhawk videos. These videos are either demonstration videos or user experience videos, the latter typically comprising video tape recordings made by a participant or 35 spectator from a monitor or television during game play. These YouTube videos are very popular, having thousands, and even hundreds of thousands, views.

Unfortunately, the most effective current approach to capturing game play is through video taping and other such 40 means. Because videos produced in this manner are unedited, analog screen captures which present game play in a linear fashion, the most interesting events in a game play sequence are not highlighted or assembled into a meaningful, entertaining narrative. Nor do current video capture techniques provide for more than the perspective of the immediate participant or spectator who is performing the video capture.

Thus, there is a need in the art, for a technique that allows for automated creation of videos for interactive entertainment based on events that occur within that entertainment.

SUMMARY OF THE INVENTION

The disadvantages associated with the prior art are overcome by embodiments of the present invention directed to a 55 technique that allows for automated creation of videos for interactive entertainment based on events that occur within that entertainment. Thus, an embodiment of the invention concerns automated movie creation based on game events. Previously replay generation was predominantly unintelligent, namely it presented the historical data linearly. The presently preferred embodiment of the invention provides a technique that attempts to find the interesting moments in a game and presents them in several interesting ways.

Choosing which events to use to create the movie is a form 65 of artificial intelligence. In one embodiment of the invention, the game designates a series of events that can occur within a

2

play session. The game must keep track of enough replay data such that these discrete events can be identified. Upon replay generation, the game searches over the historical data for that session and identifies the events that have occurred. The game may present several combinations of views of those events. For example, the game can create a highlights reel of the entire play session by linearly displaying several of the discovered events. Another embodiment allows the player to choose which events to view. The events could also be categorized, allowing the player to view a collection of a selected event type, such as all flag capture videos or all long-distance shots.

BRIEF DESCRIPTION OF THE DRAWINGS

The teachings of the present invention can be readily understood by considering the following detailed description in conjunction with the accompanying drawings, in which:

FIG. 1 is a block schematic diagram showing a video game
20 system architecture according to an embodiment of the invention:

FIG. 2 is a logic diagram showing operation of the invention during game play according to an embodiment of the invention:

FIG. 3 is a logic diagram showing operation of the invention during assembly of a game highlight video according to an embodiment of the invention;

FIG. 4 is a schematic diagram showing a game play timeline and video content that is selected for inclusion in a highlight video according to an embodiment of the invention;

FIG. 5 is a schematic diagram showing a game play timeline and resulting video content according to an embodiment of the invention;

FIG. 6 is a logic diagram showing operation of the invention during production of a game highlight video according to an embodiment of the invention; and

FIGS. 7a-7n show an edited game play sequence as produced in accordance with the invention.

DESCRIPTION OF THE SPECIFIC EMBODIMENTS

Although the following detailed description contains many specific details for the purposes of illustration, anyone of ordinary skill in the art will appreciate that many variations and alterations to the following details are within the scope of the invention. Accordingly, the exemplary embodiments of the invention described below are set forth without any loss of generality to, and without imposing limitations upon, the claimed invention.

An embodiment of the invention concerns automated movie creation based on game events. Previously replay generation was predominantly unintelligent, namely it presented the historical data linearly. The presently preferred embodiment of the invention provides a technique that attempts to find the interesting moments in a game and presents them in several interesting ways.

Choosing which events to use to create the movie is a form of artificial intelligence. In one embodiment of the invention, the game designates a series of events that can occur within a play session. The game must keep track of enough replay data such that these discrete events can be identified. These discrete events, collectively, amount to an interactive entertainment history for a particular game play session. Upon replay generation, the game searches over the historical data for that session and identifies notable events that have occurred, for example based upon user voting and/or upon favorable com-

parison with a predetermined set of notable events. The game may present several combinations of views of those events. For example, the game can create a highlights reel of the entire play session by linearly displaying several of the discovered events. Another embodiment allows the player to chose which events to view. The events could also be categorized, allowing the player to view a collection of a selected event type, such as all flag capture videos or all long-distance shots

FIG. 1 is a block schematic diagram showing a video game system architecture according to an embodiment of the invention. One embodiment of the invention is implemented in the Sony PlayStation® 3 game console. Those skilled in the art will recognize that there is significant skill in the game developer community in connection with game consoles, such as the PlayStation® 3, and that application programming interfaces for such consoles are available, for example, in respective software development kits for developers. Thus, those skilled in the art will also recognize that the various techniques taught herein can be implemented in a game console, such as the PlayStation® 3, using known programming techniques. See, for example, Rabin, Steve, Introduction to Game Development (Game Development Series), Charles River Media (June 2005).

While the invention is described herein with regard to the 25 Sony PlayStation® 3 and games that are intended for use on such game console, those skilled in the art will appreciate that developers for other game consoles can readily apply the teachings herein to such other games consoles. Accordingly, the invention herein is in no way limited to the specific 30 examples provided herein.

In FIG. 1, two or more players access a game server 11 via a network 14, such as the Internet. Each player uses a game console 10, such as the Sony PlayStation® 3. The game server includes a data store 12 that stores information about each 35 player, such as a profile, game statistics, and the like, as well as a game history comprising, in one embodiment, a timeline that contains events that occurred during a game session. These events can be significant events and/or user designated events, as described in greater detail below. The game server 40 also includes a mechanism for assembling a game play video that includes the events contained in the timeline (discussed below). In another embodiment, a history may be maintained on the game console in addition to, or instead of, on the game server. Likewise, the game console can include a mechanism 45 for assembling a game play video that includes events contained in the timeline.

FIG. 2 is a logic diagram showing operation of the invention during game play according to an embodiment of the invention. At the beginning of game play, a user enters the 50 game by spawning (200). As game play progresses (270), various events occur, such as crashes, kills, deaths, and the like (210). As these events occur, they are noted in a history of the game that is stored, as described above, along a game timeline (220). These events are noted for each player. In one 55 embodiment, events that occur between two players, such as one player killing another player, are correlated between the players to capture the event from each player's perspective. In another embodiment, each player may decide to designate an event as significant by tagging it (230), for example by press- 60 ing a button or combination of button on a game controller. These tags are also logged to the timeline (240). When the game is over (250), a video of game highlights is generated (260).

FIG. 3 is a logic diagram showing operation of the invention during assembly of a game highlight video according to an embodiment of the invention. Once a game is completed,

4

a video of the game highlights can be generated, either at the request of one or more users, under control of one or more users, or it may be generated automatically in all cases and saved to a game highlight archive for later viewing or for use, in whole or part, in generating additional videos.

At the start of the video assembly process, all tagged events are identified (300).

The tagged events in some embodiments can indicate a ranking (310) of the events based upon such factors as the significance of the event, e.g. a flag capture or multiple kill, the difficulty of accomplishing a task associated with the event, the entertainment value of the event, and the like. If such events are present, then the events are ordered (320) in accordance with various factors, such as significance or entertainment value.

The tagged events in some embodiments can also include user generated tags, e.g. based upon voting by one or more users, such as an indication that an event is entertaining, for example when compiling a list of highlights, as designated, for example, by user selection of a thumb's up icon, button, or the like; or an indication that an event is not entertaining, for example when voting to select highlights from among a list of finalist events, as designated, for example, by user selection of a thumb's down icon, button, or the like, which indicate a rating of the event by the players (330). If such rating events are present, then the events are ordered (340) according to such criteria as number of tags per event, prominence of the players who tagged an event, significance of the event, whether the number of tags exceed a minimum threshold. This embodiment of the invention provides for user interaction with the highlight selection process, e.g. it provides a mechanism that identifies the overall positive or negative affirmation by one or more users of a sequence of events in an interactive presentation, such as game play, at an instant in time. In this embodiment, the user is provided with a mechanism, such as a game controller button press, by which events are designated as being of particular interest. Thus, this embodiment of the invention provides a voting scheme analogous to the thumb's up rating system described above. The game players select those events that are of greatest interest during game play. User selection tags these events in a game play history. After conclusion of game play, the system collates the user tags and assembles a highlights video of the game. A threshold may be established that must be met before a tagged event is considered for inclusion in a video. The system may apply various heuristics to the assembly process. such as ranking events by popularity, as indicated by the number of tags associated with an event. Further, the system may limit the video to a specific number of tagged events, such as the top five ranked events. A weighting may also be applied to the events, such that some tagged events may have greater weighting than other tagged events. For example, each tag in a flag capture event may be weighted greater than tags in a kill event. Thus, ranking and selection of events for presentation in a video is multidimensional.

When a manual tag event is selected via the user during game play, the system gives higher weight to the events that occurred in the previous N seconds. Because the system might not recognize the event as interesting, this secondary mechanism allows the player to identify interesting events. For example, if one person jumps off of a ledge and lands in a moving vehicle, a player could tag that action as interesting. The designers of the game could see user created videos that have interesting content, and patch the future version of the game to include criteria, such as jumping into moving vehicles, into the automated system as well.

Once the events are ordered, based upon their ranking and rating for example, the video is assembled (350). The assembly process proceeds in accordance with any of various user or programmed decisions as to which events to present, how many events to present, how much of an event should be 5 presented, and the like. For example, some events may require inclusion of actions that lead up to the event to provide context, other events may require presentation from the perspective of more than one player, and the like. Further, some events may be more entertaining or significant than others. Thus, more popular events, as indicated by user ratings, may be promoted over more significant events, as indicated by rankings. Alternatively, one or more of the various ranking and rating factors may be used as a weighting value for one or 15 more of the other factors. Thus, while explosions, for example, may be more significant than crashed for purposes of ranking, a particular crash may be so popular, based upon it rating, that it is promoted over an explosion and included in a video instead of the explosion.

FIG. 4 is a schematic diagram showing a game play timeline and video content that is selected for inclusion in a highlight video according to an embodiment of the invention. Those skilled in the art of programming game consoles will appreciate that a history of game play and a designation of 25 significant events can be captured during such game play and stored in an electronic storage. Thereafter, such history may be retrieved and, using event designation information in the history, such as player names, coordinates in the game space, and the like, the game event, and actions leading up to the 30 event, can be recreated. In FIG. 4, a timeline is shown in which events E1, E2, and En occur during game play. It can be seen that the tag for event E1 is based upon a simple game event, while the tag for event E2 is a user tag, and the tag for 4 shows that the value of event En is greater than that of the other captured game events and, thus is given a more prominent position in the resulting video. Event E1 has the second greatest value and is also placed in the video, but in a lesser position; event E2 has least significance and, in the example 40 shown in FIG. 4, does not meet a threshold for inclusion in the

Examples of events are as follows: Example Capture the Flag Events Flag Capture Taking of a Flag Killing of a flag carrier Long distance shot A Mine blows up A player drops a mine **Example Deathmatch Events** Long distance shot 5 kill streak Entire session of player with the most kills Entire session of player with the worst score A mine blows up and kills a player A player jumps off a hill and enters a moving vehicle A player pushes another player off a hill into water, killing that player

Once an event has been discovered, a secondary step may 60 build a replay of the events that led up to the event. For example, the Table 1 below illustrates one player placing mines that blow up two other players. The main events that the video is looking to capture are player 2 and player 3 being blown up by mines. From the point of mine impact, the video is crafted to show the basic steps that led up to the impacts, as well as several seconds past the impacts.

6 TABLE 1

Time Line for Mine Explosion TIME STAMP (M:SS) PLAYER 1 PLAYER 2 PLAYER 3 Spawn, Walk Spawn 0:05 Get in tank, drive 0:15 0:21 Pick up mines 0:22 Get in jeep, drive 0:26 Get in plane 0:36 Land plane Launch grenade at player 3 tank 0:39 Get out of jeep 0:48 Place mine 1 0:60 Place mine 2 Walk over mine 1, 0:71 blow up 0:74 Body lands 0:91 Drive over mine 2, blow up 0:97 Body lands 20

Many sub events may have happened to cause the event. For example, in "Capture the Flag," the system can trace the path the flag took from the initial taking of the flag all the way to the capture of the flag. There may have been dozens of people who carried the flag and dropped the flag along the way. There may have been several long distance kills of the flag carrier. There may have been several mines that blew up around the flag carrier, or killed the flag carrier. In those cases, the system can also show the mines being placed, then zoom forward in time to them blowing up the flag carrier. Even the initial flag take has sub events of the player approaching and taking the flag.

The system can chose the amount of events and sub events event En is based upon both game events and user tags. FIG. 35 to display depending on the desired length of replay. For example, if a flag capture is desired to be shown, the system could designate five seconds of time to the initial flag take, 20 seconds of flag carrying, possibly showing five seconds of the top four events while the flag was carried, and the final five seconds before the flag capture.

FIG. 5 is a schematic diagram showing a game play timeline and resulting video content according to an embodiment of the invention. In FIG. 5, players 1, 2, and n are shown spawning, killing and being killed, and capturing a flag. The 45 events occur along a timeline. The event information is used to generate video segments that are then combined to produce a highlight video of the game. In FIG. 5, the video segments in which two or more players are linked by a common activity are combined to show both players' perspective, although this 50 is not necessary in some embodiments. In FIG. 5, for example, two video segments are shown form players 1 and 2 spawning because the both spawned at the same time. This relationship might prove to be significant when a highlight video is assembled. Likewise, when a player kills another 55 player, both players' experience is captured as a separate video segment. As can be seen, in the example of FIG. 5, players 2 and n cooperated to capture the flag and, thus, video segments for each of them are provided.

Further, a competitive dimension may be added, where tagged events in which top rated players appear are given greater weight to produce a video based, at least in part, on the rankings of the players who participated in a particular game.

An embodiment of the invention contemplates the selection of highlights from among highlight videos from several games. This embodiment thus provides a highlight video selected from among the highlights of several games. Thus, a user may request a video be prepared that shows all of that

user's tagged events from all games played by that user. Alternatively, highlights from several games can be selected based upon a particular event, for example, the top ten flag captures. Further, a voting community may select highlights. Such community may comprise, for example, each player 5 who participated in a particular game, top rated players, a "board of editors," a coterie of spectators, and the like.

FIG. 6 is a logic diagram showing operation of the invention during production of a game highlight video according to an embodiment of the invention. One embodiment of the 10 invention automatically edits events into a video and further adds such video elements as a title, cast of players, and chapters. Along these same lines, a further dimension of selection can include a personal dimension, in which a personalized video is prepared for each user, based on that user's tagging. 15 This embodiment of the invention also provides the ability to create a narrative of one or more game play events. For example, for example game history can be stored for all events from multiple perspectives. Thus, each player's role in capturing a flag can be portrayed either in order, i.e. sequen- 20 tially, or as a series of dissolves from one player to another player, such that a time line of actions is depicted from each player, leading up to the event. In this way, the invention can build a story around an event. Further, an event that is otherwise viewed by each player from their own perspective can be 25 assembled into a multi-perspective view or series of views to allow an event, such as an explosion, to be viewed from all possible angles. In one embodiment, each perspective could be presented as part of a split screen view, while in another embodiment, transitions, cuts, and the like between perspec- 30 tives are automatically inserted into the video.

In FIG. 6, the highlights, as represented the various events, are assembled into a video (600), based upon the various factors described above. The player profiles are also gathered (610) from the game server or from other sources, such as the 35 player's game console, webpage, blog, or the like. The player profile information is used to generate video credits (620), which are then appended to the video, for example at the end. The credits can include the player's game play name and the player's avatar, for example. A series of chapters and/or titles 40 can also be generated (630). For example, each chapter can provide direct access from a first level menu to a particular event. Likewise, the video, as well as each chapter, can be entitled, based upon event related metadata. Finally, the video is completed (640) and can be distributed, as discussed else- 45 where herein.

Various tools are provided in an embodiment that enhance the presentation aspects of the video. For example, as discussed above, a title and cast of characters can be automatically appended to the beginning and/or end of the video, for 50 said interactive entertainment history comprising: example based upon profile information for each player. Thus, each player depicted in an event may be featured as a star of the video in the video credits. This same user information can also be used to highlight or otherwise distinguish one associated with a character is highlighted and presented in the video so that individual users are clearly distinguished for their actions. Thus, a flag carriers would have a more distinct (and valued) presentation of their avatar in this embodiment.

An embodiment of the invention also provides for export of 60 the video highlights from one or more games. Thus, a user may export one or more events from a game to the World Wide Web, for example for display on YouTube. Such user generated content can be shared, for example at social networking sites, such a FaceBook or MySpace. In this embodiment, 65 videos can be automatically generated based upon machine heuristics, based upon user preferences applied to the video

8

generation process using machine automation, or manually edited by each game player. In this latter category, each player may present their video and receive appropriate recognition from the game player community, for example an award for the most interesting, most exciting, or funniest video.

FIGS. 7a-7n show an edited game play sequence as produced in accordance with the invention. In particular, FIGS. 7a-7h show a first view sequence and FIGS. 7i-7n show an alternate view sequence.

While the above is a complete description of the preferred embodiment of the present invention, it is possible to use various alternatives, modifications and equivalents. Therefore, the scope of the present invention should be determined not with reference to the above description but should, instead, be determined with reference to the appended claims, along with their full scope of equivalents. Any feature described herein, whether preferred or not, may be combined with any other feature described herein, whether preferred or not. In the claims that follow, the indefinite article "A", or "An" refers to a quantity of one or more of the item following the article, except where expressly stated otherwise. The appended claims are not to be interpreted as including meansplus-function limitations, unless such a limitation is explicitly recited in a given claim using the phrase "means for."

What is claimed is:

- 1. An apparatus for automated creation of videos for interactive entertainment involving at least one individual, based on events that occur within that interactive entertainment, comprising:
 - an electronic storage device for storing an interactive entertainment history, said interactive entertainment history containing a series of events captured during said interactive entertainment for said individual;
 - a processor for searching said interactive entertainment history of a particular interactive entertainment session to identify discrete events that have occurred during said interactive entertainment session, said discrete events being events that are associated with tags that include rating information for the discrete events; and
 - the processor assembling particular identified ones of said discrete events of the interactive entertainment session for said individual automatically into a video, the discrete events for the video identified in part using the rating information of the tags;
 - wherein the discrete events in the video define a highlights reel of the interactive entertainment session by linearly arranging the assembled discrete events.
- 2. The apparatus of claim 1, said interactive entertainment involving simultaneous interaction of multiple individuals,
 - an interactive entertainment timeline containing a series of events captured during said interactive entertainment for each of said multiple individuals.
- 3. The apparatus of claim 2, said processor generating any or more players, for example, the network ID or the username 55 of several combinations of views of said events, each view corresponding to a series of events captured during said interactive entertainment for a respective one of each of said multiple individuals.
 - 4. The apparatus of claim 3, said processor arranging selected ones of the events for viewing a group of events by event type.
 - 5. The apparatus of claim 1, said interactive entertainment history comprising:
 - an interactive entertainment timeline.
 - 6. The apparatus of claim 1, said processor comprising:
 - a game console, or a combination of a game server and game console, or game server.

- 7. The apparatus of claim 1, said processor correlating events between the users to capture said events from each user's perspective.
- **8**. The apparatus of claim **7**, said processor determining if each of said events exceeds a minimum selection threshold 5 based on the rating information associated with selected ones of the events.
- 9. The apparatus of claim 1, said rating information of the tags identify select events as significant.
- 10. The apparatus of claim 1, wherein one or more of said 10 events further comprises an event ranking based upon any of one or more predetermined factors.
 - 11. The apparatus of claim 1, further comprising,
 - said processor tracing a path back through a timeline of said events to discover sub events for assembly into said 15 video.
- 12. The apparatus of claim 11, said processor choosing an amount of events and sub events to assemble depending on a desired length of said video.
- 13. The apparatus of claim 1, said processor giving greater 20 weight to events in which more highly rated users generate the rating provided by the tags.
- 14. The apparatus of claim 1, said processor automatically enabling editing of the video.
- **15**. The apparatus of claim **14**, said processor enabling 25 adding of elements to said video comprising any of a title, a cast of players, or chapters.
- **16**. The apparatus of claim **14**, said processor enabling personalization of the video based upon a user profile.
- 17. The apparatus of claim 14, said processor creating a 30 narrative for the video of one or more events.
- 18. The apparatus of claim 1, said processor assembling said events into a single multi-perspective view or a series of views, each view taken from a different perspective.
- 19. A method for automated creation of videos for interactive entertainment involving at least one individual, based on events that occur within that interactive entertainment over time, comprising:
 - storing an interactive entertainment history, said interactive entertainment history containing a series of events 40 captured during said interactive entertainment for said individual;
 - searching said interactive entertainment history of a particular interactive entertainment session and identifying discrete events that have occurred during said interactive 45 entertainment session, said discrete events selected from discrete events that have pre-assigned tags that identified

10

the discrete events as significant and wherein ones of said tags include rating information;

for the individual, assembling said particular ones of the discrete events into a first video.

for at least one other individual, assembling other discrete events into a second video having views presented from a perspective of the other individual.

wherein the discrete events in the first and second videos define highlights reels of the interactive entertainment sessions, the method being executed by a processor.

- 20. The method of claim 19, further comprising, ordering said events according to a plurality of ratings.
- 21. An apparatus for automated creation of videos for interactive entertainment involving at least one individual, based on events that occur within that entertainment, comprising:
 - an electronic storage device for storing an interactive entertainment history, the interactive entertainment history containing a series of events captured during said interactive entertainment for a plurality of individuals, the interactive entertainment history includes multiple perspectives of one or more events in said series of events captured for the plurality of individuals;

a processor for,

- searching the interactive entertainment history of a particular interactive entertainment session to identify the discrete events that have occurred during the interactive entertainment session, certain ones of the discrete events selected based on corresponding tags provided through user input of the respective individuals, the tags being associated with rating information for the discrete events; and
- assembling the selected discrete events into a video, the video presenting multi-perspective view of one or more of the selected discrete events, the multi-perspective view providing the multiple perspectives for the one or more of the selected discrete events captured for one or more of the plurality of individuals,
- wherein the processor includes logic to selectively identify the discrete events for assembling the video, the selective identification based on the tags meeting a predefined threshold, wherein credits identifying particular individuals associated with selected ones of the discrete events in the video are appended to the video.

* * * * *