CSCI E—76 Student's Choice Project

Gem Escape

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The App I have created for the student's choice project is a game called Gem Escape.

The App is created using the cocos2d games framework. It provided some useful functionality, such as animation, scheduler, auto support for retina display etc.

No setup is required to get it working, just run and enjoy. The App itself contains a "How To Play" section, so feel free to read it if game play is not intuitive. The objective is to line up the gems in such a way before the times up, that you rescue as many people as you can.

I don't remember exactly the features I said when I submitted the proposal, but I think I ended up implementing it far beyond the initial spec. As I mentioned before, I will probably put this on the App store some time in the future, so I've also added ads from AdMob in game. :)

Features of the game include:
- Timer limits the time available, varying for each level.
- Game automatically ends when times up.
- Support for objects to be swapped. If objects can't be swapped, the objects will be swapped back. All with nice slide animations.
- Game start animation for objects falling into place. Different animation for resuming a game.
- Support for multiple gestures to swap objects, clicking two objects will work, and also swipes. The swipes can also be just directional, so can swipe beyond the intended obj. These multiple gestures are implemented by me, and not from some library. (Library only gives touch location, not gesture support)
- Support for game end animation, removing gems, chaining move and remove animations.
- After level is finished, game moves on (on click) to next level if game won, or restart is game lost. If reached final level, click will always restart the level.
- Game levels and objects are stored in property lists. Easy to expand and add new levels and objects.
- 9 levels of varying difficulty.
- Support for level selection.
- How To Play section to help guide new players.
- Support for unlocking new levels after a level is completed.
- Support for storing the levels unlocked so the user can play any level reached.
- Various objects with different properties to make gameplay more interesting.
- Support for pause/resume. Timer is stopped on pause and continues on resume.
- Support for restarting a level.
- Support for fast forwarding, ending game early if player is done.
- Support for automatically saving game progress.
- Support for resuming last game.
- Ads only displayed in game scene.
- Game is automatically pause if user backgrounds app or clicks on an ad.
- Easily create versions of the game with ads and without. Simply change the DISPLAY_ADS to true/false to create ad supported / non—ad supported versions of the game. The layout automatically changes to make best use of the space available.