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BYTE Interview

eign alphabets for international correspondence, mathematical symbols, and other special characters. So there were some trade-offs. We didn't want to just keep jamming two of every key on the keyboard, so we decided what the priorities were and ended up being fairly close to the industry standard. We have one Apple key, one Enter key, and two Option keys.

BYTE: The user-interface design seems to have been difficult.

Tesler: That was the hard thing that affected the most people. A lot of software and hardware engineering issues were very difficult, but they affected only a few people. Interface issues affected half the division because Training, Publications, Marketing, and the software person implementing the application all had an opinion. People like us who were overseeing all the applications had opinions, in-between managers had opinions, kibitzers on the side had opinions, too. Not everybody can

talk about what gate to use in some circuit or what routine to use in some program, but everybody can talk about the user interface. So we had to accommodate all of these things. And it turned out that good ideas and good criticisms came from everywhere. We had to come up with some objective way to decide. That's why we established the methodology which involved user testing. We had a procedure for proposing changes, reviewing the changes, narrowing it down to a few choices, with certain criteria like consistency and parsimony. And then we actually implemented two or three of the various ways and tested them on users, and that's how we made the decisions. Sometimes we found that everybody was wrong. We had a couple of real beauties where the users couldn't use any of the versions that were given to them and they would immediately say, "Why don't you just do it this way?" and that was obviously the

way to do it. So sometimes we got the ideas from our user tests, and as soon as we heard the idea we all thought, "Why didn't we think of that?" Then we did it that way.

BYTE: Bruce, could you say something about the software architecture?

Daniels: There's an operating system underneath that we built ourselves because we felt that the ones that were out there didn't quite meet our needs.

BYTE: What does yours do that others don't?

Daniels: It's not just what it does, but what it doesn't do. Some other operating systems are basically timesharing systems like Unix that have a lot of features that we don't need, and why take up extra space for that? We wanted a system that the user didn't have to be experienced to understand, and it had to be very reliable. It had to maintain the user's data and keep it there. It also had to

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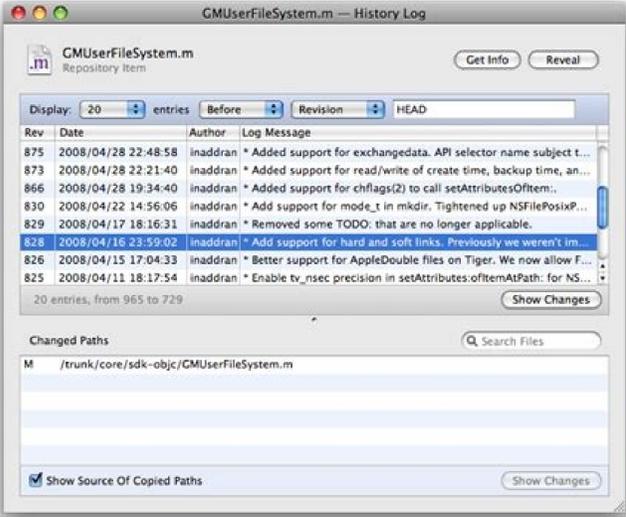
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Generation X icons Christian Slater and Winona Ryder star in this dark comedy about high school cliques and bullying that became a cult classic. Winona Ryder plays Lelaina, a valedictorian right out of college who's trying to navigate her life as a grown-up and who wants to have a career as a documentarian. Clueless (1995) Alicia Silverstone and Stacey Dash in "Clueless." Photo Courtesy: Paramount Pictures/Everett Collection This modern-day take on Jane Austen's Clueless was set in 1990s Beverly Hills and written and directed by Amy Heckerling. Martin (Hache) (1997) Juan Diego Botto and Eusebio Poncela in "Martin (Hache)." Photo Courtesy: Strand Releasing/Everett Collection Let's add a Spanish-Argentinian co-production to the mix. Based on an Irvine Welsh novel, the movie follows a group of friends and heroin addicts living in the suburbs of Edinburgh. McGregor plays Trenton, a 26-year-old living with his parents who has no prospects in life whatsoever. But through them, we listen to all sorts of good tracks like "Dry the Rain" by The Beta Band and "Oh! Sweet Nuthin'" by The Velvet Underground. Co-written and directed by Adolfo Aristarain, the movie explores the idea of identity and finding yourself from the perspective of Hache, who debates between two cities and two different chances at life. She has a good heart, but she's clueless when it comes to not judging a book by its cover. "Why Can't I Fall in Love" performed by Ivan Neville and "Everybody Knows" by Leonard Cohen make for a very timely soundtrack that also boasts themes by Pixies and Sonic Youth. Pump Up the Volume (1990) Samantha Mathis and Christian Slater in "Pump Up the Volume." Photo Courtesy: New Line/Everett Collection Christian Slater finds himself in high school again in this teenage movie where he plays Mark Hunter, a nerdy, shy teenager dealing with a double life. They meet on a Eurail train and decide to debar in Vienna and spend one night together chatting and getting to know the city — and one another. The series sure has more diversity than the original movie and is worth watching for many reasons, but the perfectly curated soundtrack is a big one. We'll let you know what we're up to, and you can tell us how we're doing.HelpTerms of UsePrivacy CentreCopyright © Walmart 2022 Steve Zahn, Winona Ryder, Ethan Hawke and Janeane Garofalo in "Reality Bites." Photo Courtesy: Universal/Everett Collection Apathetic, detached slackers... Generation X — the one that falls between Boomers and Millennials and whose members are born somewhere between 1965 and 1980 — hasn't always been characterized in the nicest terms. Academy Award-winner Kathryn Bigelow directs this action-caper in which the undercover FBI agent Johnny Utah (Keanu Reeves) infiltrates a group of surfers led by Bodhi (Patrick Swayze) while trying to identify a band of bank robbers believed to be surfers. Other than its commentary on how to choose life in an overwhelming world of consumerism, the movie also has the kind of soundtrack — with themes by Iggy Pop, Blur, Lou Reed and Elastica — that would become a referent in itself. Winona Ryder, Kim Walker, Lisanne Falk and Shannen Doherty in "Heathers." Photo Courtesy: New World/Everett Collection Granted, the big hair and bigger shoulder pads the Heathers sport here are reminiscent of a soon-to-be-outmoded '80s look. Point Break (1991) Keanu Reeves and Patrick Swayze in "Point Break." Photo Courtesy: 20thCentFox/Everett Collection This one is certainly the most adrenaline-fueled title on the list. When teenager Hache (Juan Diego Botto) overdoses in Buenos Aires, his fed-up mom decides it's time for him to spend some time with his dad Martin (Federico Luppi) in Madrid. Alicia Silverstone plays the ultra-rich and privileged Cher, one of the most popular girls at her high school. MORE FROM ASK.COM Lelaina is videotaping Troy and their friends Vickie (Janeane Garofalo) and Sammy (Steve Zahn), pursuing her passion for documentaries and trying to capture the struggles of her generation. And that's what you miss, but it fades away," says the expat Martin. "Your country are your friends. Kravitz's real-life mom, Lisa Bonet, played a role in the original movie. Plus, Keanu Reeves perfects the art of the cocky one-liner with dialogue like "The FBI is going to pay me to learn to surf?" and "I caught my first tube this morning, sir." Reality Bites (1994) Ethan Hawke and Winona Ryder in "Reality Bites." Photo Courtesy: Universal/Everett Collection If we had to choose just one movie to encapsulate how Generation X felt in the '90s, it would probably be this one. Trainspotting (1996) Ewen Bremner, Jonny Lee Miller, Ewan McGregor and Robert Carlyle in "Trainspotting." Photo Courtesy: Miramax/Everett Collection Danny Boyle directed this movie and basically put on the map actors Ewan McGregor, Kevin McKidd, Johnny Lee Miller and Kelly Macdonald. Be advised that, when it comes to representation, this list could look like it lacks a bit of diversity. You can unsubscribe at any time.Personal information provided may be collected, used and disclosed in accordance with ourPrivacy PolicyConnect with us on your favourite social networks. She also has a relationship with Michael and tries to understand whether a sort of platonic friendship with Troy is all there is to them. Also, Hulu recently adapted this story in the form of a TV show set in current-day Brooklyn starring Zoë Kravitz as Rob. High Fidelity (2000) Jack Black, Todd Louiso, John Cusack and Lisa Bonet in "High Fidelity." Photo Courtesy: Everett Collection Let's wrap things up with this story based on a Nick Hornby novel and directed by Stephen Frears. Ethan Hawke is Troy, Lelaina's womanizing best friend and perennial slacker. There's also a storyline in which the teenage Cher ends up being attracted to her college-aged ex-step-brother Josh (Paul Rudd), which hasn't necessarily aged well. But J.D. definitely has a more wicked side than Veronica could have imagined. Before Sunrise (1995) Julie Delpy and Ethan Hawke in "Before Sunrise." Photo Courtesy: Columbia/Everett Collection Richard Linklater (Boyhood) directed and co-wrote this tale about the American tourist Jesse (Ethan Hawke) and the French Céline (Julie Delpy). Hache, who his parents think may have tried to commit suicide, doesn't do much and is primarily obsessed with his ex, his guitar and getting high. John Cusack plays Rob, the heartbroken owner of an independent record store in Chicago. Waves, perfect tans, surfer culture, people jumping out of planes with and without parachutes, and precise 90-second robberies make for a movie about discontent and following a dream. But Clueless is still a classic when it comes to advanced '90s tech (brick cell phones and software that coordinates your outfits), fashion (matching plaid skirts and blazers!) and slang. Do the Right Thing (1989) Rosie Perez and Spike Lee in "Do the Right Thing." Photo Courtesy: Everett Collection Spike Lee wrote, directed, produced and even had a role in this movie set on a scorching summer day in Brooklyn. Lee managed to capture the discontent and struggles of a younger generation while portraying police brutality and the many intricacies of race relations. Rob and his employees — the brazen Barry (Jack Black) and the knowledgeable Dick (Todd Louiso) — take melomania and musical snobishness a tad too seriously. Stacey Dash plays Cher's best friend, Dionne, and Brittany Murphy is Tai, the new girl in school and Cher's new project — Cher feels Tai needs a makeover and better taste in boys. Not for nothing, Gen X has been accused of skewing white and straight and of overrepresenting white, college-educated twenty-somethings. Ben Stiller, who also directed the movie, plays Michael, a convertible-driving yuppie who works at an MTV-like TV station. She has a thing for him and realizes he's also very much into her. By night Mark is the host of a pirate radio station in which he engages in long, angst-ridden monologues about how "all the great themes have already been used up, turned into theme parks" and how he doesn't look forward to the future because the '90s are a "totally exhausted decade where there's nothing to look forward to and no one to look up to." No one knows who the voice on the radio is, but Mark's words sure pique the attention of the rebellious Nora (Samantha Mathis), who also happens to be his crush. Martin and Hache have long conversations about literature and the meaning of longing for your home country. All that while Rob tells the audience about his top five breakups. He's J.D., the mysterious and eternally-clad-in-dark-colors-and-grungy-plaid new student in Veronica's high school. She's Veronica, the only non-Heather among the mean and popular Heathers. In true Linklater fashion, the filmmaker reunited with Delpy and Hawke every decade for the sequels Before Sunset (2004) and Before Midnight (2013) that further explore the relationship between Jesse and Céline. The romantic film is basically a series of conversations between the two young people and their reflections on life. Skip to mainSkip to footerGet up-to-date information on weekly flyer features, Rollback & clearance items, exclusive products, and offers. When the owner of the Italian-American pizzeria in the heart of the film's majority Black neighborhood refuses to hang pictures of Black leaders on his Wall of Fame, conflict arises. Let's go over a few of the movie titles released when Gen Xers were coming of age and learning how to grapple with grown-up life and tedious, underpaid 9-to-5 jobs. We strived for some balance with the selection. And let's see what — other than cynicism, angst, ripped jeans and grunge music — defined the disaffected generation that gave us Winona Ryder, Ethan Hawke, Julie Delpy and Keanu Reeves.